County of Hawai‘i

Office of Sustainability, Climate, Equity and Resilience

June 30, 2025

Stantec Consulting Services Inc.

Stantec Consulting Services Inc.
1001 Bishop Street Suite 1501
Honolulu, Hawaii 96813

P.O. Box 191
Hilo, Hawaii 96721

June 30, 2025

Attention
Ms. Laura Acasio
Office of Sustainability Climate Change, Equity and Resilience
25 Aupuni Street, Suite 1301, Hilo, Hawai‘i 96720
Phone: 808-961-8019
oscer@hawaiicounty.gov

Categories of Service:

- **OS.1)** Ecology
- **OS.3)** Forestry (Watershed Management)
- **OS.5)** General Natural Resources Management and Biological Sciences Series
- **OS.9)** Soil Conservation

Dear Ms. Laura Acasio,

At Stantec, designing with community in mind isn't just our motto, it's our passion; it's why we work here. We are eager to partner with the Office of Sustainability Climate Change, Equity and Resilience to provide professional services to support your agency's mandate to lead planning and land use and administration of subdivision and zoning codes for the County of Hawai'i.

Stantec is tracking the Department's updates to the General Plan's Comprehensive Review and update, as well as the updates of Community Development Plans.

Stantec provides a wide range of design, engineering, scientific, and management services that begin at the intersection of community creativity and client relationships. We have provided architecture and engineering services for award-winning facilities. We have received certification to the ISO9001:2015 Environmental Management System standard. We commit to doing what is right by demonstrating social, economic, and environmental responsibility.

Stantec's staff are experienced in preparing environmental documents, completing environmental investigations, and well versed in code development and application for a wide range of projects and planning needs. We know what to look for. We know what's required, and we excel at finding ways to match those requirements with project goals.

We are Local, Innovative, and Available

We believe that creating a team that engages the right people is key to project success. Our team offers local expertise including myself on Maui, Dr. Michele LeFebvre, Victor Rasgado PLS and Dr. Ben Barna in Hilo, and relevant support staff and subject matter experts in Honolulu, California, Nevada, and Alaska — plus over 32,000 professionals in the global Stantec network. This gives us the flexibility to respond to any project challenge in a timely and efficient manner; to tackle even your most unique challenges.

Stantec recognizes the value of local consultants and specialized experience that can enhance project implementation, and we maintain relationships and have completed project across Hawai‘i Island with several knowledgeable and experienced consultants based in Hawai‘i County.

Stantec has prepared environmental documents compliant with Hawaii Revised Statues (HRS) 343 such as the Volcano Arts and Sciences Environmental Assessment (EA), Matsuyama Commercial Center on NELHA Land EA, Kaloko Affordable Housing Project EA (final in progress), and has coordinated baseline biological and archaeological surveys for HELCO's Saddle Road cross-island transmission line rebuild project. Stantec has also completed environmental investigations and provided environmental monitoring services across the State. With local experience backed by nationwide experience with the National Environmental Policy Act (NEPA) requirements and a wide range of environmental studies, you can be assured that Stantec has the expertise and capacity for all your needs.

The Planning Department can depend on the Stantec team for local, innovative, and reliable technical solutions and advice, delivered in a well-managed and efficient manner. The following submittal will provide you with the information required to select Stantec to provide professional services for Fiscal Year 2025-2026. Please contact me if you have any questions.

Sincerely,

Sheryl Campagna

Business Center Practice Leader
Pukalani, Maui, HI
808-727-0910 | sheryl.campagna@stantec.com

Overview

Firm Profile

Stantec empowers clients, people, and communities to rise to the world's greatest challenges at a time when the world faces more unprecedented concerns than ever before.

We are a global leader in sustainable engineering, architecture, and environmental consulting. Our professionals deliver the expertise, technology, and innovation communities need to manage aging infrastructure, demographic and population changes, the energy transition, and more.

Today's communities transcend geographic borders. At Stantec, community means everyone with an interest in the work that we do—from our project teams and industry colleagues to our clients and the people our work impacts. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure.

We are designers, engineers, scientists, project managers, and strategic advisors. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at Stantec.com or find us on social media.

Corporate Information

With over **75 years** of experience, Stantec unites more than 32,000 employees, in 450 locations, on 6 continents. Operating as Stantec Consulting Services Inc., our corporate headquarters is located at:

410 17th Street Suite 1400
Denver CO 80202-4427
(303) 295-1717
askstantec@stantec.com

Our Hawai'i offices are located at:

Stantec Consulting Services Inc.
1001 Bishop Street, Suite 1501
Honolulu, HI 96813
808-762-7202

Stantec GS Inc.
737 Bishop Street, Suite 3050
Honolulu, HI 96813
808-528-1445

While all staff located in the State of Hawai'i are assigned to the Honolulu office, several staff members live on the neighboring islands including the Big Island.

Key Qualifications

We are positioned to support the County of Hawai'i (County) for a full array of services. Our proposed project leadership team, in addition to their extensive subject experience, is familiar with the County and Hawai'i Islands allowing your projects to run smoothly and efficiently.

Contact information for key leads for each discipline is noted below. The organizational chart in each discipline section lists additional staff that can support the project. Full resumes are provided listing staff education, years of experience, and project experience. **Proof of Hawaii professional licenses are provided after each resume.**

Environmental Services
Sheryl Campagna
Business Center Practice Lead
Pukalani, Maui, HI
808-727-0910
sheryl.campagna@stantec.com

Wastewater Services
Sarang Agarwal, PE
Civil Engineer
Honolulu, O'ahu, HI
808-490-2969
sarang.agarwal@stantec.com

References/Experience Providing Similar Services

As a well-established local firm, Stantec has the resources and abilities to provide personalized service while keeping the work on schedule and within budget. Our team of engineers, environmental scientists, surveyors, and designers excel in enhancing safety while rehabilitating infrastructure for public facilities that preserves recreational assets and the natural environment.

References below can attest to our ability to provide dedicated resources, depth of staff, and knowledge of the Hawai'i islands and their communities.

References

AGENCY/FIRM NAME	REFERENCE NAME/TITLE	CONTACT PHONE NUMBER/EMAIL	YEAR SERVICES PROVIDED	PROJECT NAME/ LOCATION	CATEGORY
Maui Department of Water Supply	John Stufflebean, Director	808-270-7816 John.stufflebean@ co.maui.hi.us	2023-present	FEMA Coordination and Funding	Grant Funding, Environmental Services, Engineering
City and County of Honolulu Department of Environmental Services	Trudy Hamic, PE Project Manager	808-768-8740 thamic@honolulu.go	2020-present	Sand Island WWTP Phase 2 Planning and Design	Engineering
R.M. Towill Corporation (RMTC) for Synagro	Kyle Yukumoto Vice President	808-842-1133 kyleY@rmtowill.com	2021-present	Sand Island WWTP Synagro Bioconversion Upgrades Type	Engineering
SSFM (Prime) for Hawai'i Department of Transportation (HDOT) Harbors Division	Jared Change, PE, Project Manager	808-356-1242 jchang@ssfm.com	2021	Multi-Island Survey Control for Orthophotography and Boundary Survey of HDOT Harbors for GIS	Land Surveying
Geometrician Associates	Ron Terry Principal	808-969-7090 rterry@Hawaii.rr.com	2017-present	Various Environmental Statewide Assessments, HI	Environmental Services

Environmental Planning/ Regulatory Permitting

County of Hawai'i

ARCHITECT-ENGINEER QUALIFICATIONS

PART I - SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

County of Hawai'i

2. PUBLIC NOTICE DATE	3. SERVICE CATEGORY
June 30, 2024	Environmental Planning and Regulatory Permitting

B. CONTRACT ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Sheryl Campagna, Principal/Senior Environmental Planner

5. NAME OF FIRM

Stantec Consulting Services Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
808-727-0910	N/A	sheryl.campagna@stantec.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors)

	(check)			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUBCON-TRACTOR			
a.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	1001 Bishop Street Suite 1501 Honolulu, HI 96813-6461	Environmental Planning and Regulatory Permitting
b.	x			Stantec GS Inc. ☒ CHECK IF BRANCH OFFICE	737 Bishop Street Suite 3050 Honolulu, HI 96813-6461	Environmental Planning and Regulatory Permitting
c.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	200 East Carrillo Street Suite 101 Santa Barbara CA 93101-2137	Environmental Planning and Regulatory Permitting
d.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	Carolina One West Fourth Street Suite 820 Winston-Salem NC 27101-3818	Environmental Planning and Regulatory Permitting

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sheryl "Sherry" Campagna	Stakeholder Outreach/Environmental Compliance/HEPA/NEPA Lead	29	2

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Biology	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Hawai'i Association of Environmental Professionals (HAEP), Women in Renewable Energy (WiRE)

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City, Island, and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lahaina Watershed Flood Management Project and NEPA/HEPA Environmental Impact Statement or Environmental Assessment (Lahaina, Maui, HI)	Ongoing	2026

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The Lahaina Watershed Flood Management Project requires the development of a Natural Resource Conservation Service (NRCS), National Environmental Policy Act (NEPA), and Hawai'i Environmental Policy Act (HEPA) compliant Supplemental Plan Environmental Document (ED) to evaluate watershed protection and management measures within the Lahaina Watershed. The proposed project is intended to mitigate for flooding and reduce the impacts of sedimentation in the nearshore marine environment. Sherry manages the Stantec team and subconsultants through the development of an environmental document for this watershed and flood protection project in Lahaina on the island of Maui. She also guides and supports the communications component of this project as public outreach, stakeholder engagement, and agency coordination are vital to the project's implementation. • **Size:** 5,250 acres • **Cost:** $1.4M • **Role:** Project Manager

b.

(1) TITLE AND LOCATION *(City, Island, and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
HUD, HTF, HOME-ARP Funded "Hale O Pi'ikea" Affordable Housing Project; a Part 58 Environmental Assessment (EA) Under NEPA and HEPA (Kihei, Maui, HI)	Ongoing	2024

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Hale O Pi'ikea Affordable Housing Project is a 220-unit, three-phase development planned at the intersection of Pi'ikea Avenue and Liloa Drive in Kihei, Maui, Hawai'i. This project includes a Part 58 EA and supporting technical studies. The Part 58 EA would be prepared in accordance with NEPA and the U.S. Department of Housing and Urban Development (HUD) environmental regulations. The Project intends to serve individuals and families earning between 30% and 60% Area Median Income (AMI) and help address the critical need for additional affordable housing on Maui. The project is also one component of the larger Kihei Downtown Development, promoting mixed-use sustainable development in Kihei which aims to foster a closely-knit, live/work community environment. • **Size:** 12.59 acres • **Cost:** $80K • **Role:** Environmental and Community Engagement Manager

c.

(1) TITLE AND LOCATION *(City, Island, and State)*	(2) YEAR COMPLETED	
Hawai'i Youth Correctional Facility (HYCF) Campus Redevelopment Plan (Kailua, O'ahu, HI)	PROFESSIONAL SERVICES 2018	CONSTRUCTION *(If applicable)* N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: The Hawai'i Youth Correctional Facility (HYCF) plans to transition from a traditional punitive institution to a center (to be named the Kawailoa Youth and Family Wellness Center) that will focus on a comprehensive rehabilitation model involving wards, young adults, and families with community and government support. Eleven programs and their associated facilities were proposed for the facility which includes more than 20 buildings (including a Department of Education school) and covers over 400 forest and pasture acres owned by the State of Hawai'i. Public and private partnerships were proposed to support the 11 programs designed to support and transition former wards back into the community. Cultural, historic, zoning, remediation, and utilities issues were identified as part of the redevelopment plan. As the environmental project manager, Sherry led the environmental, historic, permitting, and cultural components of this project. She supported the development of priorities for future development of the facility which includes historic buildings and cultural sites. Sherry was responsible for agency coordination, stakeholder engagement, and public outreach. She also led a series of stakeholder and public charettes and authored the redevelopment planning report. • **Size:** 400 acres • **Cost:** Unknown • **Role:** Environmental Project Manager and Communications Manager

d.

(1) TITLE AND LOCATION *(City, Island, and State)*	(2) YEAR COMPLETED	
Pōhakuloa Training Area (PTA) Master Plan, Environmental Assessment (EA), and Environmental Condition of Property (ECOP) (Pōhakuloa Training Area, Hawai'i Island, HI)	PROFESSIONAL SERVICES 2017	CONSTRUCTION *(If applicable)* N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: This project included a Master Plan, EA, and Community Relations Plan (CRP) for the first master plan completed for this significant Army installation. The master plan projects and permits included utilities, transportation (air, road, harbor), cantonment facilities, and military training areas. Issues managed in the CRP included land lease, depleted uranium, endemic species, cultural sites, water wells, anti-Thirty Meter Telescope protests adjacent to the site, hunting, drones, UXOs, wildfires, invasive species, FAA waivers, live fire training, water rights, and flooding• **Size:** 133,000 acres • **Cost:** Unknown • **Role:** Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
Guam Military Build Up EIS Public Involvement Plan (PIP) (Guam and the Commonwealth of the Northern Marianas Islands)	PROFESSIONAL SERVICES 2010	CONSTRUCTION *(If applicable)* N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: The "Guam Military Build Up" Environmental Impact Statement (EIS) was the largest EIS written in the history of the National Environmental Policy Act (NEPA) Ms. Campagna managed the many iterations of community planning for the rebasing of approximately 8,000 Marines and their dependents from Okinawa to Guam. Planned land uses included utilities, infrastructure, housing, recreation sites, temporary workforce housing, military training areas, and energy projects. As the Public Involvement Plan (PIP) Manager for NEPA EIS, Sherry built relationships with local leaders in Guam and the Commonwealth of the Northern Marianas Islands (CNMI). She planned all public involvement strategies, response actions and subsequent activities. Sherry also implemented changes to traditional federal NEPA public meetings that reflected local and Chamorro culture thereby earning acceptance by the project's opposition and cultivating mutual respect. She led the team's response to over 10,000 public comments and improved local access to project information and understanding of the potential impacts and mitigations. • **Size:** ~180 miles^2 • **Cost:** $2M • **Role:** Program Manager

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Malueg, PE	Vice President, Sustainability and Resiliency Planning	40	25

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Winston-Salem, NC)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Water Biology BS, Civil and Environmental Engineering	Professional Engineer (Civil) #15642, KY

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Memberships: Water Environment Federation; Member, American Public Works Association; American Society of Civil Engineers

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ala Wai Watershed Resilience Master Plan Support (Honolulu, HI)	Ongoing	**N/A**

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In 2018, Congress passed an emergency appropriations bill which included a $350 million allocation in support of mitigating flooding in the Ala Wai Watershed. Stantec, in partnership with the Rockefeller Foundation's 100 Resilient Cities, was selected to assist the local sponsor, the City/County of Honolulu, negotiate the development of the partnering agreement with the USACE. Key project elements include planning and design of series of high head dams, low flow diversion channel through local golf course, and integration of proposed new canal floodwall and levee with community open space and complete streets visions. • **Size:** N/A • **Cost:** N/A • **Role:** Technical Advisor

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
HUD National Disaster Resilience Completion (NDRC) Phase 2 (Multiple Jurisdictions, Nationwide)	2016	2016

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: John served as lead and technical advisor for the development of seven NDRC Phase 2 grant applications. The individual value of federal grant funding solicited ranged from $200,000 to $865,000,000. Clients included states, counties, and districts. Hazards addressed ranged from sea-level rise, tornadoes, hurricanes, riverine flooding, heat and subsidence. Resilient solutions offered focused on maximizing the triple bottom line addressing social, economic, and environmental values. The value of grants awarded to our clients approached
$250 million. • **Size:** N/A • **Cost:** $2.1M **Role:** Program Manager/Technical Advisor

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
"Strategic Financial Pathways", "Living with Water" Blue-Green Corridor Design (New Orleans, LA)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In partnership with the City of New Orleans and Rockefeller Foundation (100RC), John completed analyses and facilitated workshops that evaluated the right mix of green and grey infrastructure and financial mechanisms to pay and maintain improvements. Analysis considered level of service, implementation period and included evaluation of a blend of millage, stormwater user fees, fee-in-lieu-of, tourism taxes, and external grant funding to pay for selected plan. The project has now evolved into detailed design of blue-green infrastructure. • **Size:** N/A • **Cost:** $6.5M • **Role:** Resilience Technical SME

d.

(1) TITLE AND LOCATION *(City and State)*

"London 2100" Water Strategic Plan (London, United Kingdom)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: John and the Stantec team helped Thames Water District facilitate the design of a community-based (year – 2100) vision for water. London's water infrastructure, which is approaching 200 years old, is being revisited to identify strategies for meeting increased demand because of projected four-fold population growth. The vision includes separating storm and sanitary systems, harvesting rainwater, gray water industrial reuse supported by innovative and sustainable funding strategies. • **Size:** N/A • **Cost:** $1.7M • **Role:** Resilience Global SME

e.

(1) TITLE AND LOCATION *(City and State)*

Tottenville Beach Recovery and Restoration (Staten Island, NY)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This HUD sponsored Rebuild by Design project strives to stabilize the shoreline, reduce coastal flood risk, and protect the local economy. John and the Stantec team's resilient solution currently under design includes integrated living shorelines, elevated walking trails, green infrastructure, ecosystem restoration and matrix of natural and reinforced sand dunes. **Scope:** Resiliency planning, Living shorelines/wetlands/shoreline protection, Civil engineering/stormwater management and modeling, Coastal berms/landscaping, Elevated roads and pathways, Community outreach, multi-federal agency coordination, HUD grant administration, and Flood risk reduction • **Size:** Staten Island • **Cost:** N/A • **Role:** Technical Advisor

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sarah Troedson, GISP	Senior GIS Analyst	26	6

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Thousand Oaks, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Master of Geographic Information Systems BS, Geology	Certified Geographic Information Systems Professional (GISP) #58500

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: North American Cartographic Information Society, Urban and Regional Information Systems Association (URISA), Women in GIS

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hawai'i Green Growth Ala Wai Watershed Collaboration (Honolulu, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This project was conducted to support the development of a Holistic Ala Wai Watershed Management Plan for Growth in partnership with UH Sea Grant and the Waikiki Beach Special Improvement District Association. The plan addresses six priority issues for the watershed: stormwater flood risk; ecological restoration and protection; storm surge and sea level rise; hurricane, climate, and disaster resilience; improvements of recreation spaces; uplift and restore cultural sites and practices. • **Size:** N/A • **Cost:** $9K • **Role:** Senior GIS Analyst

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui and Molokai Dam Safety Inspections Phase I (Maui and Molokai Islands, HI)	2013	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Responsible for gathering current and historic seismic data to create maps of seismic activity within 100km of multiple dams on the islands of Maui and Molokai, as well as producing geologic maps and location maps for field staff and for reports. • **Size:** N/A • **Cost:** $50K • **Role:** Senior GIS Analyst

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lahaina Watershed Flood Management Project (Lahaina, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The Lahaina Watershed Flood Management Project requires the development of a Natural Resource Conservation Service (NRCS), NEPA, and HEPA compliant Supplemental Plan Environmental Document (ED) to evaluate watershed protection and management measures within the Lahaina Watershed. The proposed project is intended to mitigate for flooding and reduce the impacts of sedimentation in the nearshore marine environment. • **Size:** 5,250 acres • **Cost:** $1.4M • **Role:** Senior GIS Analyst

d.	(1) TITLE AND LOCATION *(City and State)* Maui Asset Inventory and Characterization (Wailuku, HI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2020	CONSTRUCTION *(If applicable)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Review and catalog physical and virtual assets for Maui DWS via spreadsheets, geodatabases, client interviews, and other data sources. Normalize and reconcile regional naming conventions to allow for assessments of critical infrastructure. Prepare initial inventory for client review and internal categorizing to feed into future safety and emergency preparedness plans. • **Size:** County-wide • **Cost:** N/A • **Role:** Senior GIS Analyst		
e.	(1) TITLE AND LOCATION *(City and State)* Sampling and Analysis Plan, Hono'uli'uli National Historic Site (Waipahu, HI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES Ongoing	CONSTRUCTION *(If applicable)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Implement Sampling and Analysis plan for the Hono'uli'uli National Monument, creating sample locations across eight decision units, setting up field maps (paper and digital) and enabling field data collection of sample locations in real time. Additional support for field safety by identifying prior obstructions and pits and providing live locations in Field Maps. • **Size:** 123 acres • **Cost:** Confidential • **Role:** Senior GIS Analyst		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Michele Lefebvre, Ph.D.	Project Manager, Environmental Scientist	22	15

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Ph.D., Biology BA, Biology	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certifications and Training: Adjunct lecturer at University of Hawai'i, Hilo – Environmental Impact Assessment ENSC 441, Spring 2019; NEPA and 24 CFR Part 58 Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities, Hilo, HI; Vegetation of the Hawai'ian Islands (audited course ENSC-457); NEPA Cumulative Effects Analysis & Documentation, San Francisco, CA

Memberships: National Association of Environmental Professionals; American Exploration and Mining Association

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Kaloko Affordable Housing Project HRS 343 and HUD NEPA, Environmental Assessments (Kaloko, HI)	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Michele is coordinating with the applicant (Hawai'i Island Community Development Corporation) and a local sub-consultant (Geometrician Associates LLC) to prepare the EAs. She helped to collect the traffic data and coordinated the preparation and completion of the Traffic Impact Assessment Report (TIAR) for the project with a Stantec traffic engineer. Michele also coordinated the water impact assessments with two local hydrologist sub-consultants and the assessment of cultural impacts with a local cultural resource firm. **Scope:** Environmental Assessments • **Size:** Hawai'i Island • **Cost:** $146K • **Role:** Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Puna Geothermal Venture HEPA EIS, Pahoa, HI	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Michele was responsible for preparing a HEPA EIS for the upgrade of equipment at Ormat Technologies operating geothermal power plant near the Kilauea Volcano on Hawai'i Island. The upgrade of equipment would reduce the footprint, emissions, and noise compared to current operations. The need for the EIS has been identified by the Public Utilities Commission. Coordinating baseline surveys, coordinating with the approving agency (Planning Department), organizing public outreach, and preparing the impact analysis for the EIS. Public concerns about the project include air quality, water quality, geologic hazards, and noise. • **Size:** N/A • **Cost:** $462K • **Role:** Project Manager/Biologist

c.

(1) TITLE AND LOCATION *(City and State)*

Matsuyama Commercial Center on NELHA Land HRS 343, Environmental Assessment (Kailua-Kona, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2018	2023

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Michele coordinated with the applicant (Mats4 LLC) and the approving agency (Natural Energy Laboratory of Hawai'i Authority) to prepare the EA. Her responsibilities included working with the agency to identify issues, conduct public comments analysis, and write the Draft and Final EA. Michele helped to collect the traffic data and coordinated the preparation and completion of the TIAR for the project with a Stantec traffic engineer. Michele also coordinated the biological survey with a local sub-consultant and the assessment of cultural impacts with a local cultural resource firm. • **Size:** Hawai'i Island • **Cost:** $44K • **Role:** Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*

Fenway Development Project HEPA EA (South Kona, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Michele prepared a HEPA EA for this multi-unit two-phase housing development in South Kona. Coordinating the update to the biological survey and conducting a traffic impact analysis for the project. Stantec will coordinate with the applicant and approving agency (Planning Department) through EA approval. • **Size:** N/A • **Cost:** $111K • **Role:** Project Manager/Biologist

e.

(1) TITLE AND LOCATION *(City and State)*

HELCO Saddle Road Transmission Line Re-build Project – Baseline Surveys and Stakeholder Outreach (Hawai'i, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Michele coordinated with stakeholders (private landowners, local agencies, and Pōhakuloa Training Area) to obtain permission for local subconsultants to conduct a biological survey and archaeological inventory for this cross-island transmission line. For this survey, Stantec also assisted HELCO with identifying alternative line alignments for the inventory to ensure baseline data would be available for the project's future NEPA and/or HRS 343 analysis. • **Size:** Hawai'i Island • **Cost:** $269K • **Role:** Project Manager

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Nelson	Environmental Planner	15	3

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Oceanography & Native American Tribal Law	

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

John spent 10 years with Native American Tribes, Local Districts, and Federal Government as an environmental director, physical scientist, project manager, field biologist, and NEPA specialist. He led marine projects and managed development of scientific assessments, monitoring restoration and/or management plans, field programs, and permit application reports in the United States. John leads multiple interdisciplinary teams working primarily on natural resource and conservation-related plans and projects. While conservation projects are his primary passion, he has managed several plans and Environmental Assessment (EA), Environmental Impact Statement (EIS), and Phase I & II efforts for governmental entities and organizations.

Certifications and Training: Emergency Medical Technician, First Aid, and First Responder, National Operator of Uninspected Passenger Vessel, Certified small boat operator, Boating Safety U.S. Foundation & United States Coast Guard, Section 106 Cultural Resources Consultant, Section 106 of the National Historic Preservation Act

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Lahaina Watershed Flood Management Project (Lahaina, HI)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

John is the Nature Based Solutions and Traditional Ecological Knowledge Technical Lead for the Lahaina Watershed Environmental Assessment, which evaluates the impact of proposed flood control measures and related projects within the Lahaina Watershed in Maui, Hawaii. The assessment aims to address issues such as flooding, sedimentation, and water quality, while also considering the preservation of natural and cultural resources. John is helping with the assessment that identifies the need for improved infrastructure to manage stormwater and prevent damage to residential and commercial properties. John is assisting the restoration of native vegetation in riparian areas to enhance ecological function and water quality. He is working to address the implementation of erosion control measures to reduce sedimentation in waterways. John is helping the County of Maui and NRCS in strategies to minimize negative impacts include timing construction activities to avoid critical periods for wildlife, using best management practices to control erosion, and involving the community in restoration projects. He is also involved with the assessment that emphasizes the importance of preserving cultural and historical sites within the watershed. John has in-depth engagement with local communities, including Native Hawaiian groups, and is a key component of the planning process to ensure that traditional knowledge and values are respected. The assessment process includes public meetings, stakeholder consultations, and opportunities for community input to ensure that the project reflects local needs and priorities.

b.

(1) TITLE AND LOCATION *(City and State)*: Kekaha Brownfields Community Engagement (Kekaha, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

John is assisting the Kekaha EPA Brownfield community engagement initiative, which focuses on involving local residents and stakeholders in the redevelopment of brownfield sites in Kekaha, Hawaii. Brownfields are properties where the presence or potential presence of hazardous substances, pollutants, or contaminants may complicate their expansion, redevelopment, or reuse. The EPA's initiative aims to address environmental, health, and economic concerns associated with these sites. John is assisting key components of the project engagement which include community outreach and education: informing residents about the brownfield sites, potential risks, and the benefits of redevelopment. This includes public meetings, informational sessions, and distributing educational materials. Stakeholder engagement efforts include local businesses, community organizations, and government entities in planning and decision-making processes. This ensures that redevelopment plans align with community needs and aspirations. He studies, researches, and conducts environmental assessments to identify contamination levels and developing plans for site remediation. This may involve soil testing, removal of hazardous materials, and long-term monitoring to ensure safety. He aims to promote the redevelopment of brownfield sites to create job opportunities, stimulate local economies, and improve property values.

c.

(1) TITLE AND LOCATION *(City and State)*: Brawley Wash Watershed Plan and Environmental Assessment (Arizona, USA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

John is assisting the Pima County Brawley Wash Watershed Environmental Assessment, which evaluates the potential environmental impacts of various projects and initiatives aimed at managing water resources within the Brawley Wash Watershed in Pima County, Arizona. This assessment is conducted under the guidelines of the National Environmental Policy Act (NEPA) and includes a detailed analysis of the current environmental conditions, potential impacts of proposed actions, and measures to mitigate adverse effects. The primary purpose of the project is to address flooding, erosion, and sedimentation issues in the Brawley Wash Watershed. The need for the assessment arises from the necessity to improve water management, enhance public safety, and protect infrastructure and natural resources. John is helping with the assessment, which evaluates multiple alternatives, including no-action alternative.

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Tricia W. Dang	Senior Environmental Planner	21	3

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MA, Business Administration MA, Urban and Regional Planning BS, Environmental Studies and Sociology	LEED Accredited Professional, Green Building Certification Institute

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: APA Hawai'i Chapter - American Planning Association

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: Maui DWS FEMA Coordination and Funding Strategy

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(If applicable)*:

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Working closely with Stantec's Disaster Recovery team and Dr. Kim Pugel, Tricia supports the funding team's effort for the County of Maui Department of Water Supply (Maui DWS) pursuits of FEMA and other federal funding in response to the Lahaina and Kula fires in August 2023. To be responsive to federal agency and disaster timelines, she supports the team's development of a grants database, application submittals, and a prioritized project database synthesizing $1.2B in capital projects to build a more fire-resilient water system County-wide. **Role:** Planner

b.

(1) TITLE AND LOCATION *(City and State)*: Pulama Lanai (Hawaii, USA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2023; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Tricia supported Pūlama Lanai, the land and resource management company on the island of Lanai, with Community Planning, Environmental Planning, and Transportation Planning services for existing and proposed agricultural facilities and shared public infrastructure.
Role: Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: Utility Scale Solar PV Facilities – Confidential Client (Makawao, Pukalani, Kihei, Maui)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: **Ongoing**; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Tricia leads the environmental tasks for three utility scale solar PV projects on the island of Maui. She works directly with the client, subconsultants, and Stantec technical staff for this design-build suite of 3 solar installations. She manages and directs staff through environmental assessments, archaeological investigations, public and stakeholder engagement, and environmental permitting for this project.
Role: Environmental Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*: Charles I. Elliott Maintenance and Cargo Facility - Tenant Improvements (Honolulu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017; CONSTRUCTION *(If applicable)*: 2017

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

As a part of the first phase of the Hawaii Airports Modernization Program, Tricia was contracted to take over the delayed Hawaiian Airlines Maintenance and Cargo Hangar Facility Tenant Improvement project, leading and completing the interior improvements for the newly constructed 280,000 SF Facility within seven months. This work included leading the completion of 170 outstanding project items across five major departments to support over 1,100 employees housed in the new facility. She worked directly with over 40 vendors and 80 Hawaiian Airlines leads to gather/confirm requirements and data, select vendors, execute contracts, oversee completion of work, and track budget.
Role: Project Lead

e.	(1) TITLE AND LOCATION *(City and State)* Waiawa Kai Infrastructure Development Plan (Honolulu, HI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2018	CONSTRUCTION (*If applicable*) N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm Tricia conducted a comprehensive desktop review of the area over the last 100 years as well as site visits to over a dozen existing properties to identify and detail infrastructure opportunities, strategic phasing, and ROM costs to permit and develop the 70-acre coastal area to support KS' agricultural and education objectives. **Role:** Planner		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Peer Amble	Environmental Planner	36	26

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Santa Barbara, CA)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE
BA, Physical Geography	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Louisiana Archaeological Society, Society for American Archaeology, Society for Hawaiian Archaeology, Society for Historical Archaeology

Awards: Northern Marianas Humanities Council Lifetime Achievement Award, 2019, Saipan

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Pacific, EIS for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Worked closely with Project Manager to "plan the work" by instituting streamlining and process improvements into the DOPAA development (i.e., clarity, presentation and simplification of details necessary for the impact analysis), development of impact analysis framework and EIS "mockup" for the 16 resource areas, and integration of ongoing/previous NEPA documents. Provided direct guidance to SMEs and resource authors to establish an analytical approach, particularly for critical issues such as schedule development and management including design integration, parallel timelines for agency consultations, and public involvement. • **Size:** N/A • **Cost:** $7.2M • **Role:** Senior NEPA Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Pacific, EA for the Home Basing of the MQ-9 Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base HI (Kaneohe Bay, Oahu, HI)	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Led team's analysis and agency consultation support for controversial and high-profile project, which concluded with a Finding of No Significant Impact (FONSI) within one-year schedule. Provided guidance and support for consultation with the State of Hawai'i Office of Planning and Sustainable Development, Planning Division who concurred with the Marine Corps' determination that the action would not result in any reasonably foreseeable direct or indirect effects to uses or resources within the Hawai'i Coastal Zone. Integrated NHPA Section 106 consultation input from Marine Corps, Navy, and consulting parties into analysis, including development and modification of robust alternatives. Skillfully adapted to heightened public interest by implementing a full-team effort to address/integrate public comments and deliver the EA on schedule. • **Size:** N/A • **Cost:** $878K • **Role:** Project Manager/Senior NEPA Planner

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Pacific, EA for RM14-1420 Repair Lima Wharf and RM14-1423 Repair Mike and November Wharves at Naval Base Guam (Apra Harbor, Guam)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Provided senior NEPA planning support and oversight for resource analyses. In project initiation phases, conveyed issues of agency and stakeholder concern and considerations for analysis of marine resources, other natural resources, and human resources. This included the development of the integrated master project schedule, DOPAA development (with particular emphasis on the alternatives) and determining the appropriate level of analysis for resource areas, and efficiencies of integration of prior NEPA analysis, consultations, and environmental compliance actions. Provided senior analysis for coastal consistency documentation. • **Size:** N/A • **Cost:** $290K • **Role:** Senior NEPA Planner

d.

(1) TITLE AND LOCATION *(City and State)*
NAVFAC Southwest, EIS for Revitalization of NAVWAR Facilities at Naval Base Point Loma Old Town Campus (San Diego, CA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Participated in development of five alternatives foundational for this unique action supporting the Navy's cyber warfare mission. Coordinated with NAVFAC and SMEs to ensure development of a reasonable range of alternatives that met the purpose and need. Coordinated with the Navy to incorporate input from state and local agencies into a strategy of integrated analysis for specific components. Supported management of subcontractors and development/ integration of the Visual Impact Assessment and worked with other resource analysts to resolve issues and strengthen the assessment of existing conditions and potential impacts, primarily for visual resources, air quality, and transportation. • **Size:** N/A • **Cost:** $6.3M • **Role:** Senior NEPA Planner

e.

(1) TITLE AND LOCATION *(City and State)*
NAVFAC Pacific, Draft EIS/Overseas EIS for the Commonwealth of the Northern Mariana Islands Joint Military Training (CJMT), (Island-wide, Commonwealth of the Northern Mariana Islands)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Led a team of JV staff to research and prepare the Draft EIS/OEIS and all supporting studies and surveys. Supported Marine Corps Forces Pacific (Executive Agent) in interactions with six federal supporting agencies and multiple stakeholder organizations in the CNMI. Coordinated consultations with federal agencies, including ESA Section 7 (USFWS and NMFS), Clean Water Act (CWA) Section 404 including Least Environmentally Damaging Practicable Alternative (LEDPA) analysis, and Magnuson-Stevens Fishery Conservation Management Act Essential Fish Habitat (EFH) assessment. Oversaw the safe and successful execution of extensive field studies, involving large field teams conducting work in remote locations for marine biology and cultural resources in previously unstudied areas of the Western Pacific. Implemented innovative technology solutions (e.g., collaborative SharePoint file management systems and use of Web-based GIS tools) for 120 JV, Navy, and Marine Corps project team members. Developed project budgeting and tracking system to manage costs for 200+ subtasks and 15 contract actions over five years. Managed complex schedule, integrating numerous moving parts and milestone-dependent elements. • **Size:** N/A • **Cost:** $26.2M • **Role:** Project Manager/Senior NEPA Planner

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Benjamin Berridge, AICP, PMP	Environmental Planner	16	11

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE
BA, Environmental Studies	Project Management Professional, Project Management Institute Certified Planner #384544, American Planning Association, American Institute of Certified Planners

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: American Planning Association, Hawai'i Chapter, Association of Environmental and Health Sciences Foundation

Additional Training/Certifications: Project Management Professional (PMP) Boot Camp, Batelle Memorial Institute/Coastal Marine Spatial Planning Advanced Training Certificate

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Managed all Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. Managed collection of storm water samples at 75 industrial facilities throughout the island of Oahu. Duties included investigating, planning and installation of remote water quality and atmospheric monitoring stations to collect first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Provided QA/QC oversight of telemetered monitoring stations incorporating data logged by automated sampling equipment, water quality sensors, as well as area-velocity sensors and pressure transducers providing continual flow records and site conditions. Also, tracked/archived weather, coordinated 24/7 on-call teams for grab/composite sample collection, maintained rainfall-runoff curves and monitored automated sampling equipment. • **Size:** N/A • **Cost:** $462K (2022) • **Role:** Project Manager/Environmental Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture (Pāhoa, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Providing environmental monitoring services to Puna Geothermal Venture, in Pāhoa, Hawai'i. Services include meteorology, noise, air quality, and groundwater monitoring as required by Geothermal Resource, Underground Injection Control, and Noncovered Source Permits from the State of Hawai'i Department of Health (DOH). Manages data collection (EDAS), conducts QA/QC process for daily air quality reports, and authors semi-annual hydrological monitoring reports and monthly noise, meteorological, and air quality monitoring reports. Field activities include semi-annual groundwater sampling and calibration of meteorological monitoring equipment. • **Size:** N/A • **Cost:** $2.4M • **Role:** Program Manager/Environmental Planner

c.

(1) TITLE AND LOCATION *(City and State)*
Engineering and Environmental Planning Studies for Alternative Energy at PMRF (Kekaha, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2021
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Provided oversight and management of engineering and environmental planning studies to support current and future resiliency and energy requirements for Pacific Missile Firing Range (PMRF) in Kekaha, Kauai, Hawai'i. As part of a PMRF energy resiliency roadmap, the project team completed assessments to determine the viability and sustainability of alternative energy solutions, to include a cost benefit analysis of waste to energy (WTE) and other alternative energy technologies. In addition, the team consulted with cooperating government agencies, State, County, local utilities including Kauai Island Utility Cooperative (KIUC) and local industry for the island of Kauai. The project team analyzed the impacts on cultural and natural resources and recommended mitigation measures to minimize potential impacts. Environmental planning data collected was used for future National Environmental Protection Act (NEPA) documents for PMRF. • **Size:** N/A • **Cost:** $511K • **Role:** Program Manager/Environmental Planner

d.

(1) TITLE AND LOCATION *(City and State)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2023
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Provided management and oversight of the development of a large, multifaceted, and high-profile Environmental Impact Statement (EIS) evaluating improvements, repairs, and/or new construction in support of Joint Base Pearl Harbor Hickam (JBPHH) submarine dry dock and dry dock production facility infrastructure, which is part of the US Navy's Shipyard Infrastructure Optimization Program (SIOP). Coordinated evaluation of four alternatives and a no action alternative in detail, ESA Section 7 consultation including Biological Assessment, Essential Fish Habitat Assessment, NHPA section 106 consultation, and USACE CWA Section 404 permitting and compensatory mitigation planning as well as State of Hawai'i Department of Health (HDOH) CWA Section 401 water quality certification support. • **Size:** N/A • **Cost:** $5.5M • **Role:** Project Director/Environmental Planner

e.

(1) TITLE AND LOCATION *(City and State)*
Biological and Benthic Habitat Survey in Support of SIOP and INRMP for JBPHH (Oahu, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2023
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Provided oversight and management of various biological and benthic studies to document benthic habitats, coral density and cover, biofouling communities, fish species, and protected species in support of Navy Shipyard Infrastructure Optimization Program (SIOP) as well as a revision of the Joint Base Pearl Harbor Hickam (JBPHH) Integrated Natural Resources Management Plan (INRMP). Project team supported Navy consultations with various agencies and provided data supporting recommendations for which corals found within the multiple construction footprints can potentially be successfully relocated. Project team developed a GIS web application that showcases all study findings during the entire project duration in an easily navigable interactive platform. • **Size:** N/A • **Cost:** $1.3M • **Role:** Project Director/Environmental Planner

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jennifer Miller, PMP, LEED AP	Environmental Planner	23	8

15. FIRM NAME AND LOCATION *(City and State)*

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MA, Planning and Development BA, Political Science	Project Management Professional – Project Management Institute, LEED Accredited Professional - USGBC

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

N/A

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Assisted Project Manager. Assisted Project Manager, responsible for Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. Managed collection of storm water samples at 75 industrial facilities throughout the island of Oahu. Duties included investigating, planning and installation of remote water quality and atmospheric monitoring stations to collect first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Designed and provided QA/QC oversight of telemetered monitoring stations incorporating data logged by automated sampling equipment, water quality sensors, as well as area-velocity sensors and pressure transducers providing continual flow records and site conditions. Also, tracked/archived weather, coordinated 24/7 on-call teams for grab/composite sample collection, maintained rainfall-runoff curves and monitored automated sampling equipment. • **Size:** N/A • **Cost:** $462K (2022) • **Role:** Deputy Project Manager/Environmental Planner

b.

(1) TITLE AND LOCATION *(City and State)*: NAVFAC Pacific, Alternative Energy Planning Studies and Resiliency Roadmap, Pacific Missile Range Facility (Kauai, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Worked as part of the JV team coordinating staff resources, maintaining schedule and budget, reviewing deliverables and addressing key challenges with the project. Specifically, worked with NAVFAC, the project team, and resource analysts in the development of deliverables for this pioneering study with multiple stand-alone technical deliverables that did not have templates, pre-defined formats, or prior examples. Was responsible for management of terrestrial natural resource and cultural resource field work, including planning, logistics, and scheduling that was complicated by rigid COVID-19 restrictions and protocols. Supported NAVFAC upward leadership reporting to address high visibility project with congressional interest. • **Size:** N/A • **Cost:** $2.2M • **Role:** Senior NEPA Planner/Deputy Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: NAVFAC Pacific, EIS for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2023; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Key member of the leadership team for this large, multifaceted, and high-profile SIOP EIS. Integrated resource staffing and coordinated analysis for 43 key JV team resource analysts. Established and monitored budget and adherence of internal deadlines to meet aggressive two-year NEPA timeline in conjunction with Navy mission need date. Served as the senior reviewer for the land use section, which addressed consistency with the CZMA, Explosive Safety Quantity Distance (ESQD) arcs, Installation Restoration Sites, and the JBPHH Installation Development Plan. Led day-to-day coordination and was senior reviewer for mission-critical CWA and Rivers and Harbor Act permitting documents that were needed to maintain construction schedule. • **Size:** N/A • **Cost:** $7.2M • **Role:** Senior NEPA Planner/Deputy Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*

NAVFAC Pacific, EA for the Home Basing of the MQ-9 Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base HI, (Kaneohe Bay, Oahu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Supported Project Manager to plan and execute tasks with a multidisciplinary team of 21 analysts, SMEs, and support personnel. Spearheaded front-end project planning, resource analyst coordination, and project management planning to organize and keep this high-priority project on schedule. Acted as the local representative in internal and external meetings including resource specific development meetings, and for public participation planning and implementation. • **Size:** N/A • **Cost:** $878K • **Role:** Senior NEPA Planner/Deputy Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*

NAVFAC Pacific, Biological and Benthic Habitat Survey in Support of SIOP and INRMP for Pearl Harbor (Oahu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Led project team and managed all project aspects including health and safety planning, adherence to scope, budget and schedule monitoring and reporting. The bulk of the effort involved oversight of subcontractors conducting intensive field work during the height of the COVID-19 pandemic. Addressed scheduling, logistical, and administrative requirements to safely conduct the project and adhere to protocols. Provided senior review of all deliverables and ensured that the subcontractor work product met the requirements. Was responsive to periodic quick-turn taskers throughout the project to support NAVFAC on interim status, data, and findings to support related NAVFAC planning and engineering needs. • **Size:** N/A • **Cost:** $2.1M • **Role:** Project Manager/Environmental Planner

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Hannah Hubanks	Environmental Scientist	15	4

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Natural Resources and Environmental Management BS, Zoology	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certifications and Training: NRCS Technical Service Provider (TSP)
Continuing Education: 2022 National Military Fish and Wildlife Association-Natural Resources Annual Training Workshop (34 continuing education credits)

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Supported Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. The project continually implements storm water sampling procedures pursuant to the NPDES permit requirements and manages data for all associated industrial facilities. Duties include maintenance of remote water quality and atmospheric monitoring stations to collect first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Provided support to telemetered monitoring stations involving data logging by automated sampling equipment and tracked/archived weather data. **Size:** N/A • **Cost:** $462K (2022) • **Role:** Environmental Scientist

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture (Pāhoa, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Provided oversight and management of environmental services for the geothermal power plant, Puna Geothermal Venture, located in Pahoa on Hawai'i Island. Tasks included meteorological, air quality and groundwater monitoring services required by permit from the Hawai'i Department of Health (HDOH). Responsibilities included management of environmental data collection and QA/QC processes for daily air quality reports, semi-annual hydrological monitoring reports, and monthly noise and meteorological and air quality monitoring reports as required by HDOH. Field activities included semi-annual groundwater sampling. **Size:** N/A • **Cost:** $2.4M • **Role:** Deputy Project Manager/Environmental Scientist

c.

(1) TITLE AND LOCATION *(City and State)*: Hawai'i Soil Health Index Study (Statewide, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Researched and analyzed Hawai'i soil samples for the development of a Hawai'i Soil Health Index. Results used in conjunction with available SSURGO data are intended to improve the assessment of soils in the state and provide tools to document degradation or improvement. Coordinated, collected, and processed soils from locations across the state and generated an approach to evaluate soil health across a variety of land uses and soil types. Worked closely with the University of Hawai'i and COMET-Farm (Carbon Management and Emissions Tool) developers to integrate findings into a tool utilized by the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) to monitor soil health in Hawai'i. • **Size:** N/A • **Cost:** $500K • **Role:** Project Manager/Lead Researcher/Senior Environmental Scientist

d.

(1) TITLE AND LOCATION *(City and State)*: Water Quality Monitoring and BMP Inspections for Agribusiness Development Corporation (Mana Plains, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Supporting project management and execution of water quality and sediment monitoring and best management practices (BMP) inspections for the Agribusiness Development Corporation (ADC) owned lands on the Mana Plains near Kekaha, Kauai. The water quality and sediment monitoring were in response to litigation brought against the state for violations of the Clean Water Act. Sample sites were selected throughout the watershed to help assess the complete dynamics of the systems; many were in remote locations. The project team presented quarterly monitoring and inspection reports to the state and the public. Toxicity analysis was conducted on local species of interest as part of this project. The project team also provided recommendations for improvements in the watershed to improve water quality. • **Size:** N/A • **Cost:** $1.8M • **Role:** Deputy Project Manager/Senior Environmental Scientist

e.

(1) TITLE AND LOCATION *(City and State)*: Waimanalo Watershed Restoration Project, O'ahu Resource Conservation and Development Council (O'ahu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Coordinated and monitored Best Management Practices (BMPs) for a Hawai'i State Department of Health (DOH) Clean Water Branch (CWB) grant-funded project. Managed site visits, coordination of native plant restoration, photo monitoring, contracts and produced quarterly progress reports with participating farms in this watershed-wide effort to reduce erosion and nutrient and sediment pollution following United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) standards. Served on the City and County of Honolulu Storm Water Utility Stakeholder Advisory Group. **Size:** N/A • **Cost:** $375K • **Role:** Project Manager/Conservation Specialist/Senior Environmental Scientist

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Bert Weeks	Marine Biologist	10	5

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Master of Advanced Studies/Marine Biodiversity and Conservation BS, Biology	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: National Association of Environmental Professionals

Certifications and Training: AAUS Science Diver

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Stormwater Monitoring and MS4 NPDES Permit Related Services for the City and County of Honolulu 2022 (Honolulu, HI)	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Providing support to CY22 stormwater monitoring services for National Pollutant Discharge Elimination System (NPDES). Project is to monitor and maintain nine (9) rain gauges across the island of Oahu in support of stormwater runoff sampling from City-operated industrial facilities. The key project goal is support of NPDES permit compliance for these facilities. Implements stormwater sampling during qualifying storm events and submission of water samples to laboratory facilities for further analyses in support of NPDES permit compliance. Drafts Storm Event Summary Reports and water sample compositing and field water quality grab parameter analysis after each storm event. Assists in completion of twice weekly weather tracking and archiving of forecasts, annual compilation of a sample location photo log, and an annual report summarizing findings. • **Size:** N/A • **Cost:** $462K • **Role:** Environmental Scientist/Biologist

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Providing support for an EIS evaluating improvements, repairs, and/or new construction in support of JBPHH submarine dry dock and dry dock facility infrastructure with four alternatives and a no action alternative. Project has an aggressive timeline for completion (two years). Ongoing work includes completion of the State of Hawai'i DOH Water Quality Certification, Compensatory Mitigation Plan, and the USACE individual permit. The proposed project's construction-related actions include dredging, fill, pile driving, installation of new temporary and permanent in-water structures, demolition of existing landside structures, and construction of new temporary and permanent landside facilities. The EIS evaluated impacts to five alternatives with various support facility options and 16 resources areas including dredging and filling within a Superfund remedial action area and demolishing existing historic structures. There are three cooperating agencies including USACE, USEPA, and NMFS. • **Size:** 176,800 SF Dry Dock and Waterfront Production Facility; 2,800-acre area • **Cost:** $7.1M • **Role:** Marine Biologist/Environmental Scientist

c.

(1) TITLE AND LOCATION *(City and State)*

Coral Monitoring Surveys and Coral Maintenance in Support of RM14-1420 Repair Lima Wharf and RM14-1423 Repair Mike and November Wharves Naval Base Guam (Apra Harbor, Guam)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Surveyed and maintained assessments of transplanted coral for a Navy mitigation project in Guam. • **Size:** N/A • **Cost:** $1.6M • **Role:** Environmental Scientist/Biologist

d.

(1) TITLE AND LOCATION *(City and State)*

Integrated Natural Resources Management Plan (INRMP) Update, JHPHH (Oahu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Providing support for this significant update and overhaul to the JBPHH INRMP from 2011. The INRMP is a revision consisting of the comprehensive integrated plan for the conservation and management of natural resources to comply with natural resources stewardship requirements while optimizing mission activities. • **Size:** N/A • **Cost:** $614K • **Role:** NEPA Specialist/Biologist

e.

(1) TITLE AND LOCATION *(City and State)*

State of Hawai'i Department of Land and Natural Resources Division of Aquatic Resources (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☐ Check if project performed with current firm

Scope: Created framework for coral restoration permitting for the State of Hawai'i. Created the coral restoration statewide strategy for the State of Hawai'i. Coordinated the inter-agency West Maui Funding and Agency Support Team (FAST). Organized the US Coral Reef Task Force meeting for 2021. Implemented the State of Hawai'i Holomua 30x30 initiative. • **Size:** N/A • **Cost:** N/A • **Role:** National Coral Management Fellow /Biologist

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Boyd Dixon, PhD, RPA	Archaeologist	57	17

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
PhD, Anthropology MA, Anthropology BA, Anthropology	Registered Professional Archaeologist, Founding Member #4772

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Louisiana Archaeological Society, Society for American Archaeology, Society for Hawaiian Archaeology, Society for Historical Archaeology

Awards: Northern Marianas Humanities Council Lifetime Achievement Award, 2019, Saipan

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
NAVFAC Pacific, Alternative Energy Planning Studies and Resiliency Roadmap, Pacific Missile Range Facility (Kauai, HI)	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Performed quality control review on three technical reports for different alternatives. Survey areas included over 2,134 acres on the Mānā Plain along Kauai's western shore. Provided guidance for crafting an impact analysis for pre-planning cultural resources evaluation. Documents supported Archaeological Inventory Surveys within the potential project sites for the proposed North Grid Connection and Undergrounding Project, and Solar PV and Battery Storage projects identified in the PMRF Roadmap. • **Size:** N/A • **Cost:** $2.1M • **Role:** Archaeologist/Principal Investigator

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Archaeological Subsurface Survey at South Finegayan, Naval Base Guam	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Directed archaeological data recovery and prepared subsequent report for Latte site 66-08-0141. Led team for excavations which included backhoe trenching for geoarchaeological studies. Participated in shovel test pits for excavation archaeological sites within the potential direct impact areas for subsurface deposits. Conducted test units of Ground Penetrating Radar anomalies previously detected were captured. • **Size:** N/A • **Cost:** $265K • **Role:** Archaeologist/Principal Investigator

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Archaeological Data Recovery (Andersen Air Force Base, Guam)	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Directed archaeological data recovery investigations at 14 prehistoric sites and the NW Field WWII air base and post war camp. Manually excavated using 0.5 by 0.5-meter (1.6 by 1.6 foot) and 1 by 1 meter (3.3 by 3.3 foot) excavation units. Manual excavations revealed the remains of prehistoric oven cooking features and activity areas, plus WWII and post war artifacts and archival documents. Prepared subsequent report to provide mitigation actions for adverse effects to known cultural resources, which are within the direct impact area for a portion of the range complex located within AAFB. • **Size:** 14 sites • **Cost:** $896K • **Role:** Archaeologist/Principal Investigator

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
d.	NAVFAC Pacific, Draft EIS/Overseas EIS for the Commonwealth of the Northern Mariana Islands Joint Military Training (CJMT), (Island-wide, Commonwealth of the Northern Mariana Islands)	PROFESSIONAL SERVICES 2016	CONSTRUCTION *(If applicable)* N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Conducted archaeological surveys on Pagan and Tinian in the CNMI. Provided extensive support for public meetings and Section 106 consultation. Assembled/directed team conducting cultural resources surveys and identification/evaluation of traditional cultural properties in Pagan and Tinian. His extensive knowledge of the local area and local issues was instrumental in successful regulatory coordination efforts. • **Size:** N/A • **Cost:** $26.2M • **Role:** Archaeologist/Principal Investigator

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
e.	Archaeological Surveys and Cultural Resources Studies in Support of the Live-Fire Training Range Complex Supplemental EIS (Guam)	PROFESSIONAL SERVICES 2016	CONSTRUCTION *(If applicable)* N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Conducted high intensity survey for proposed direct impact alternatives in support of the Supplemental EIS. The cultural resources survey occurred in areas throughout Guam including private lands. Guided and participated in complex archaeological surveys of over 5,395 acres in which a large number and variety of cultural resources were affected. Participated in shovel test pits for excavation archaeological sites within the potential direct impact areas for subsurface deposits. Recorded and prepared detailed maps, site descriptions, and photo-documented all archaeological resources identified within the potential direct in-fill survey areas and collected sufficient data to evaluate these sites for listing in the NRHP, as per 36 CFR Part 60. • **Size:** 5,395 acres • **Cost:** $2M • **Role:** Archaeologist/Principal Investigator

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Stephanie Clarke, GISP	GIS Specialist	11	10

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Solana Beach, CA)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE
BA, Biology and Environmental Studies	Geographic Information Systems Professional #161322

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Training/Certifications: 2021 Geography Directed Study: LIDAR, Unmanned Aircraft Systems, ArcGIS**,** Creating/Sharing GIS Content ArcGIS, Displaying Raster Data ArcGIS, Field GIS Colleting/Editing Data ArcPad 10, Going Places with Spatial Analysis, Performing Line Sight Analysis, Performing Viewshed Analysis ArcGIS Pro, Python ArcGIS Pro, Geodatabase Domains/Subtypes ArcGIS

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Responsible for the development of supporting graphics. • **Size:** N/A • **Cost:** $462K (2022) • **Role:** Lead GIS Analyst

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Responsible for data collection and data analysis. Compiled marine biological data from multiple JV projects and created a comprehensive dataset. Identified and analyzed sensitive species. • **Size:** N/A • **Cost:** $2.4M • **Role:** Lead GIS Analyst

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Assessment for the Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft at MCAS Kaneohe Bay Marine Corps Base HI (Oahu, HI)	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: responsible for analysis and creation of National Environmental Policy Act (NEPA) quality figures. Assisted in development of alternatives incorporating sensitive resources including biological resources, cultural resources, and water resources. Calculated acreages for project impacts and new impervious surfaces. Managed data within Controlled Unclassified Information (CUI) environment for security purposes. Assembled final GIS data deliverable in the GEOFidelis 4.0.5 format. • **Size:** N/A • **Cost:** $551K • **Role:** Lead GIS Analyst

d.	(1) TITLE AND LOCATION *(City and State)* Regional Data Book Web Tool Support, Maintenance and Update (Kamehameha Schools, HI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If applicable)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Updating previous contract (2017) to replace the data within the Stantec GS-developed web tool with the latest information. Delegated tasks to team members, led weekly meetings with the client, and tracked budget and hours billed. As a Data Analyst, contributed to researching over 50 different data points related to socioeconomic, education, landownership, Native Hawaiian demographic, and client-specific data across the State of Hawai'i. Responsible for data formatting, JSON configuration file creation, and JSON testing before delivering the files to the client. As the GIS Lead, researched or created datasets related to socioeconomic, education, landownership, etc. data points, published the data to ArcGIS Online, developed JSON configuration files integrating the ArcGIS Online maps for use within the web tool. In addition, created several ArcGIS Online Web Apps, Operation Dashboards, and Story Maps related to Legislative Districts, COVID-19 (coronavirus), and Cultural Resources. • **Size:** N/A • **Cost:** $462K • **Role:** Deputy Project Manager/GIS Specialist		
e.	(1) TITLE AND LOCATION *(City and State)* Biological and Benthic Habitat Survey in Support of SIOP and INRMP for Pearl Harbor, HI	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If applicable)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Responsible for data, management, analysis, and creation of figures for marine resources survey. Coordinated regularly with field teams, project management, and clients to keep the multiple reports on a timely schedule. Converted field data into GIS feature classes and attached field photos in a related table. Maintained and organized hundreds of collected data points for 14 study areas. Constantly managed and updated an ArcGIS Online Web Map viewer for Navy clients to view biological data as points, polygons, and photos as it was collected and processed throughout the multi-year period. • **Size:** N/A • **Cost:** $2.1M • **Role:** Lead GIS Analyst		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jessica Hawkins	Biologist	20	2

15. FIRM NAME AND LOCATION *(City and State)*
Stantec GS Inc. (Honolulu, HI)
Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BA, Environmental Science BS, Biology	United States Forest Service (USFS), Department of Agriculture (DOA), Interagency Aviation Training Certification for Crewmember

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Ms. Hawkins has contributed to the field of conservation and natural resource management in the state of Hawaii for almost 20 years. She began her career during college as a Water Quality Supervisor for He'eia State Park in Kaneohe, Hawai'i. Duties included water quality monitoring field efforts, lab analysis, data entry, supervising field team, and report writing. After college she served as an assistant Education/Outreach Assistant for the Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife in Honolulu, Hawai'i. Duties included organizing and running public outreach booths; restoration of native garden at DLNR Kalanimoku building; videography; and distribution and production of education/outreach materials. Ms. Hawkins served the majority of her conservation and natural resource management career at O'ahu Army Natural Resources Program at Schofield, Hawai'i in several positions. Tasks included invasive species management and eradication; intense field work in remote locations; forest bird monitoring and banding; invertebrate monitoring and relocation; T&E species management (including plant monitoring, fruit collection, reintroduction); plant identification; and greenhouse and seed lab duties. Her most recent position was as a Natural Resource Wildlife Technician and Supervisor with the Natural Resources Program of the Naval Facilities Engineering Systems Command in Pearl Harbor, Hawai'i. Tasks included supervising field team; conducting and coordinating fishing compliance surveys; invasive species management and removal; T&E species management (including monitoring [and nesting] waterbirds, shorebirds, MBTA species, green sea turtles); administrative duties (including scheduling, purchasing, trainings, safety compliance and protocols); report writing, and presentation of data.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Water Quality Monitoring and BMP Inspections for Agribusiness Development Corporation (Mānā Plains, Kaua'i, HI)	2024	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Supporting water quality and sediment monitoring and best management practices (BMP) inspections for the Agribusiness Development Corporation (ADC) owned lands on the Mānā Plains near Kekaha, Kaua'i. The water quality and sediment monitoring were in response to litigation brought against the state of Hawai'i for violations of the Clean Water Act. Samples sites were selected throughout the watershed to help assess the complete dynamics of the system; many were in remote locations. Duties include assisting with water quality monitoring, processing, and distribution. **Role:** Biologist.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ke Ala Kahawai O Waimea (Waimea, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Principal Investigator for HRS Chapter 6E-8 AIS and NHPA Section 106 archaeological survey.* Coordinated cultural resource management requirements for HRS Chapter 343 (HEPA) CATEX prepared by Stantec. **Role:** Biologist.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Stormwater Monitoring and MS4 NPDES Permit Related Services for the City and County of Honolulu, Honolulu, HI	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Duties include collection of first-flush storm water samples (according to 40 CFR 136 and EPA guidelines), collection of water quality paraments at various sites around O'ahu, and distribution of water samples. Responsibilities also include maintenance of remote water quality and atmospheric monitoring stations and support of telemetered monitoring stations paraments at various sites around O'ahu. **Role:** Biologist

d.

(1) TITLE AND LOCATION *(City and State)*

Environmental Impact Statement (EIS) for Pacific Missile Range Facility (PMRF) Succeeding Leases and Easements

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Field responsibilities as a subject matter expert (SME) include terrestrial biological surveys on PMRF and KPGO lands, ESA-listed and MBTA-listed species identification, plant identification, geospatial data collection, and data cataloguing. **Role:** Biologist

e.

(1) TITLE AND LOCATION *(City and State)*

Integrated Natural Resources Management Plan/Updates (Joint Base Pearl Harbor Hickam, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

The Joint Base Pearl Harbor-Hickam (JBPHH) Integrated Natural Resources Management Plan (INRMP) includes Navy and Navy-leased land on O'ahu. Duties include contribution and technical review to JBPHH INRMP Land Cover/Land Use Development GIS White Paper, response to comments, updates, and overall review of JBPPHH INRMP. **Role:** Biologist

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Angelica Demers	Biologist	9	1

15. FIRM NAME AND LOCATION *(City and State)*
Stantec GS Inc. (Honolulu, HI)
Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Natural Resource Management AS, Aquarium Science	AAUS Scientific Diver, Open Water, Advanced, Nitrox, and Rescue SCUBA diver certified

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Miss Demers has a professional focus on the National Environmental Policy Act (NEPA) environmental reviews and planning projects for the Navy, Marine Corps, Air Force, National Guard Bureau, state, municipal, and private sector clients. Responsibilities for NEPA reviews include authoring and analysis of Environmental Impact Statements (EIS) and Environmental Assessments (EA) for military actions throughout the Pacific.

She has extensive experience working with Pacific marine species and has been involved in Pacific coral growth, removal, translocation, and monitoring for large scale coral mitigation projects in Hawaiian waters. She has extensive husbandry experience growing corals in an ex-situ environment and is proficient in coral disease diagnosis and disease management. She has in-situ experience identifying Pacific coral, fish and invertebrate species and has been involved in artificial reef monitoring programs. Miss Demers has experience consulting with state, federal and local government bodies such as the U.S. Coral Reef Taskforce to assist in the execution of various coral mitigation projects in Hawai'i.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Stormwater Monitoring and MS4 NPDES Permit Related Services for the City and County of Honolulu (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Providing support of Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. The project continually implements storm water sampling procedures pursuant to the NPDES permit requirements and manages data for all associated industrial facilities. Duties included maintenance of remote water quality and atmospheric monitoring stations and collecting first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Support includes monthly calibration of telemetered monitoring stations and assisting in monitoring station maintenance as needed. **Role:** Biologist

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Water Quality Monitoring and BMP Inspections for Agribusiness Development Corporation (Mana Plains, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Supporting project management and execution of water quality and sediment monitoring and best management practices (BMP) inspections for the Agribusiness Development Corporation (ADC) owned lands on the Mana Plains near Kekaha, Kaua'i. The water quality and sediment monitoring were in response to litigation brought against the state for violations of the Clean Water Act. Sample sites were selected throughout the watershed to help assess the complete dynamics of the systems; many were in remote locations. The project team also presented quarterly monitoring and inspection reports to the state and the public and provided recommendations for improvements in the watershed to improve water quality. Toxicity analysis was also conducted on local species of interest as part of this project. Responsibilities include water sampling, data collection, and report writing. **Role:** Biologist

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Environmental Impact Statement for Pacific Missile Range Facility (PMRF) Succeeding Leases and Easements (Mana Plains, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Supporting management of the NEPA EIS process for the United States Department of the Navy to retain the use of approximately 16,028 acres of state land on Kaua'i in support of continued on-going military testing and training at the Navy Pacific Missile Range Facility. Responsibilities included technical writing support for NEPA EIS documents. **Role:** Biologist

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	Integrated Natural Resources Management Plan Updates (Joint Region Marianas, Guam and CNMI)	PROFESSIONAL SERVICES: Ongoing	CONSTRUCTION (*If applicable*): N/A
d.	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm Supporting project team by providing technical writing expertise and data management in the revision of the 2023 Joint Region Marianas (JRM) Integrated Natural Resources Management Plan (INRMP) to chart a course for natural resources management on JRM lands. The JRM INRMP includes Navy lands on Guam and leased lands in the CNMI on Tinian and Farallon de Medinilla. The INRMP was prepared in accordance with the Sikes Act as amended through 2023, Department of Defense Instruction 4715.03, and OPNAVINST 5090.1D. The updated JRM INRMP was fully compliant with the proposed ESA species up listings, recent NMFS listing and from consultations with USFWS for new actions (JGPO SEIS, CJMT EIS, MITT EIS, Task Force Talon EA) objectives under JRM jurisdiction. Many actions and management strategies were revised including significant updates to GIS maps and database resources. **Role:** Biologist		

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	Integrated Natural Resources Management Plan Updates (Joint Base Pearl Harbor-Hickam, Honolulu, HI)	PROFESSIONAL SERVICES: Ongoing	CONSTRUCTION (*If applicable*): N/A
e.	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm Supporting project team by providing technical writing expertise and data management in the revision of the 2023 Joint Base Pearl Harbor Hickam (JBPHH) Integrated Natural Resources Management Plan (INRMP) to chart a course for natural resources management on JBPHH lands. The JBPHH INRMP includes Navy lands on Oahu, Hawaii. The INRMP was prepared in accordance with the Sikes Act as amended through 2023, Department of Defense Instruction 4715.03, and OPNAVINST 5090.1D. The updated JBPHH INRMP was fully compliant with the proposed ESA species up listings, recent NMFS listing and from consultations with USFWS for new actions (JGPO SEIS, CJMT EIS, MITT EIS, Task Force Talon EA) objectives under JBPHH jurisdiction. Many actions and management strategies were revised including significant updates to GIS maps and database resources. **Role:** Biologist		

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Christine Chaplin, GISP	GIS Specialist	18	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Natural Resources & Environmental Management	Geographic Information Systems Professional (GISP)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Miss Chaplin is recognized for her ability to leverage GIS technology to analyze, interpret, and visualize complex spatial data, lead GIS projects, collaborate with interdisciplinary teams, and effectively communicate technical information to both technical and non-technical stakeholders. She is committed to staying current with emerging trends in GIS technology and applying innovative solutions to address spatial challenges.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Engineering and Environmental Support Aunu'u, Hilo, and Laupāhoehoe Harbors (American Samoa, Northeast Hawai'i Island, and East Hawai'i Island)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Responsible for geospatial analysis and mapping tasks. Participated in the development of project plans, timelines, and milestones, ensuring alignment with GIS requirements. Led the collection, validation, and integration of geospatial data relevant to the Aunu'u, Hilo, and Laupāhoehoe Harbors. Worked with surveyors, environmental scientists, and engineers to ensure accurate and comprehensive GIS datasets. Conducted spatial analyses to support engineering and environmental assessments for harbor improvement projects. Developed GIS models to assess the impact of proposed changes and enhancements to harbor infrastructure. Produced high-quality maps and visualizations to communicate complex geospatial information to project stakeholders. Created thematic maps illustrating environmental factors, engineering designs, and relevant spatial data. **Role:** GIS Specialist.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Environmental Assessment for the Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron, MCB Hawai'i (Kaneohe Bay, Oahu, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Supporting project management and execution of water quality and sediment monitoring and best management practices (BMP) inspections for the Agribusiness Development Corporation (ADC) owned lands on the Mana Plains near Kekaha, Kaua'i. The water quality and sediment monitoring were in response to litigation brought against the state for violations of the Clean Water Act. Sample sites were selected throughout the watershed to help assess the complete dynamics of the systems; many were in remote locations. The project team also presented quarterly monitoring and inspection reports to the state and the public and provided recommendations for improvements in the watershed to improve water quality. Toxicity analysis was also conducted on local species of interest as part of this project. Responsibilities include water sampling, data collection, and report writing. **Role:** GIS Specialist.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Environmental Impact Statement for Pacific Missile Range Facility (PMRF) Succeeding Leases and Easements	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

GIS team member for project to prepare the Description of Proposed Action (DOPAA) for the real estate effort at PMRF and NASA's Koke'e Park Geophysical Observatory. Christine is the GIS lead for this project collecting and compiling necessary geospatial data into report maps to describe the historical and current land use and status for PMRF; including coordinating with biologists and managing the data collected using Field Maps on handheld GPS units during wetland, vegetation, and wildlife surveys. Leveraged the use of ArcGIS Online Instant App builder to show all relevant project areas and data collected for internal use. Utilizing ArcMap 10.x according to the scope of work to compile and analyze data for map production. Data collected using Navy IGI&S Data Collection Guidance (DCG) standards and specifications for vector GIS deliverables and will be delivered in the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) Navy Data Model (NDM) schema. **Role:** GIS Specialist.

d.

(1) TITLE AND LOCATION *(City and State)*

Environmental Assessment (EA) for Ground-Based Forces Modernization at MCB Hawaii (MCBH), NAVFAC Pacific (Kāneʻohe Bay, Oʻahu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Supporting project team by providing technical writing expertise and data management in the revision of the 2023 Joint Region Marianas (JRM) Integrated Natural Resources Management Plan (INRMP) to chart a course for natural resources management on JRM lands. The JRM INRMP includes Navy lands on Guam and leased lands in the CNMI on Tinian and Farallon de Medinilla. The INRMP was prepared in accordance with the Sikes Act as amended through 2023, Department of Defense Instruction 4715.03, and OPNAVINST 5090.1D. The updated JRM INRMP was fully compliant with the proposed ESA species up listings, recent NMFS listing and from consultations with USFWS for new actions (JGPO SEIS, CJMT EIS, MITT EIS, Task Force Talon EA) objectives under JRM jurisdiction. Many actions and management strategies were revised including significant updates to GIS maps and database resources. **Role:** GIS Specialist.

e.

(1) TITLE AND LOCATION *(City and State)*

Stormwater Monitoring and MS4 NPDES Permit Related Services for the City and County of Honolulu (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Leveraged ArcGIS Survey123 to build surveys to automate the field crew's workflow where they would typically write rain gauge calibration information onto a paper form. Now when they calibrate and inspect rain gauges, they can simply enter the information into the Survey123 form on their phones, the information automatically syncs back to ArcGIS Online when connected to Wi-Fi. **Role:** GIS Specialist.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Benjamin Barna, PhD, RPA	Senior Archaeologist	20	2

15. FIRM NAME AND LOCATION *(City and State)*
Stantec GS Inc. (Honolulu, HI)
Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
PhD, Anthropology MA, Anthropology BA, Archaeology and United States History	Register of Professional Archaeologists (RPA)

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Dr. Barna is a Senior Archaeologist who has worked on over 250 projects in Hawai'i as a Principal Investigator and/or supervisor. His expertise includes National Historic Preservation Act (NHPA) Section 106 Compliance, Archaeological Assessments, Inventory Surveys, Reconnaissance Surveys, Field Inspections, Data Recovery, Preservation Planning, and Archaeological Monitoring. His professional duties require supervising and conducting fieldwork including, but not limited to, inventory surveys, excavation, site recordation, and construction monitoring; literature searches and historical research; artifact identification, analysis, and cataloguing; and technical report writing. Dr. Barna has over 18 years of professional archaeological experience and earned his PhD on research focused on the cultural evolution of Hawai'i's ranching community in the 19th and 20th centuries as expressed through the archaeology and history of ranching stations on Hawai'i Island. Dr. Barna formerly served as a Surface Warfare Officer in the U.S. Navy, and he is a past President of the Society for Hawaiian Archaeology.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
NEPA Pre-Planning for Pacific Missile Range Facility (PMRF) Succeeding Leases and Easements (Kaua'i, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Provided senior review and coordination for integrating Hawaii Revised Statutes Chapter 343 (HEPA) cultural impact assessment requirements into NEPA environmental planning requirements. Provided review and comments on subcontractor archaeological survey plan. **Role:** Senior Archaeologist.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Ke Ala Kahawai O Waimea (Waimea,Hawai'i County, Hawaii)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Principal Investigator for HRS Chapter 6E-8 AIS and NHPA Section 106 archaeological survey. Coordinated cultural resource management requirements for HRS Chapter 343 (HEPA) CATEX prepared by Stantec. **Role:** Senior Archaeologist.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
EA for Ground-Based Forces Modernization at MCB Hawaii (Kane'ohe Bay, Oahu, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Author of cultural resources section of NEPA EA. Senior review of subcontractor archaeological testing plan. Coordinated with client and subcontractor for review of SHPO. Client: Department of the Navy, Navy Facilities Engineering Command Pacific, HI. **Role:** Senior Archaeologist.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Environmental Assessment for Hale O Pi'ikea Affordable Housing Project (Kihei, Maui, HI)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Provided National Historic Preservation Act (NHPA) Section 106 support for County of Maui for affordable housing project. Conducted on-site interview with consulting party on behalf of County of Maui. Project involved the preparation of a HUD NEPA environmental assessment (EA) for the construction of two phases of an affordable housing project utilizing funds from the Department of Housing and Urban Development. **Role:** Senior Archaeologist.

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Prepare Environmental Assessments, Supporting Environmental Studies, and Conservation District Use Application for the Ainako Development Project	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Provided senior review of subcontractor during archaeological survey for compliance with Hawaii Revised Statutes Chapter 6E-8. Conducted Hawaii Revised Statutes Chapter 343 (HEPA) cultural impact assessment. Project involved the preparation of HEPA environmental assessment for an affordable housing project located in Hilo, Hawaii. **Role:** Senior Archaeologist.

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **1**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hawai'i Green Growth (HGG) Ala Wai Watershed Collaboration (AWWC) (Honolulu, HI)	2020	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
HGG	Julius Lorenz-Fisher	808-351-5947

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The Stantec team oversaw two related projects for GIS support to the Ala Wai Watershed Collaborative.

KEY RELEVANCE

Scope:
- GIS
- Data Analytics

Size: Ala Wai Watershed
Cost: $9K
Key Personnel:
- Sarah Troedson, Senior GIS Analyst

The AWWC convenes a network partner to advance a shared vision of prosperity and resilience for the Ala Wai watershed. Building on decades of watershed management and community efforts and inspired by the Polynesian Voyaging Society's Mālama Honua message in 2015, this network has grown to over 60 stakeholders from government, civil society, business, and academia who have converged as the AWWC to solve the challenges of this watershed together. HGG coordinates the AWWC.

Our GIS support included analytics and preparation of report and graphics to define water shed boundaries and overlay state and local political districts as well as land uses by type and ownership. Stantec determined the specific borders of the Ala Wai Watershed District using existing databases and information sources.

1. Ala Wai Watershed District Analysis: Conduct an analysis to determine what proportion (% of area and properties) is owned by private/state/city/federal landowners, and what proportion (% of area and properties) is zoned in each of the different City Land Use Zones.
2. Analysis of Political Districts as they Overlap with the Ala Wai Watershed District:
    a. What proportion (% of area and properties) of the political district would be within the Ala Wai Watershed District?
    b. What proportion (% of area and properties) of the Ala Wai Watershed District falls within each political district?
    c. For the area that is both within the boundaries of each political district and the Ala Wai Watershed District, what proportion (% of area and properties) is owned by private/state/city/federal landowners, and what proportion (% of area and properties) is zoned in each of the different City Land Use Zones? Key subcategories of landowners such as UH and DOE within the state and BWS and DPR within the City should be broken out separately as appropriate.
3. Prepared communications materials and assist HGG and the AWWC in joint briefings, meetings, and presentations, as needed.

Stantec also prepared a story map to document community group projects throughout the watershed at present and in recent years. This provided visual documentation of the community groups efforts over the past three years and provided quantitative information for HGG to document the effectiveness of the program: miles of streams cleaned, planted with native species, and invasive species removed, as well as number of volunteers involved.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *(Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **2**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Kaloko Affordable Housing Project HRS 343 and HUD NEPA, Environmental Assessments (Kaloko, HI)	2018	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hawai'i Island Community Development Corporation	Jeremy McComber	808-319-2428

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec is coordinating with the applicant (Hawai'i Island Community Development Corporation) and the approving agency (Office of Housing and Community Development) to write the Environmental Assessments (EAs).

The first EA has been prepared in accordance with Chapter 343 of the Hawai'i Revised Statutes (HRS) and following approval of this EA, a federal EA will be prepared that will be compliant with the Department of Housing and Urban Development (HUD's) NEPA requirements. This will include working with the agency to identify issues, conducting early consultation before preparing the Draft EA, pre comments, and preparing the Final EA.

KEY RELEVANCE

Scope:
- Environmental Assessments

Size: Hawai'i Island
Cost: $145K
Key Personnel:
- Michele Lefebvre, PhD., Project Manager
- Benjamin Berridge, AICP, PMP, Program Manager

The project would construct approximately 111 two- and three-bedroom units. A centrally located community center would provide onsite property management space, a kitchen, private meeting rooms, communal gathering space, mailboxes, and laundry facilities. The site would be landscaped, with common gathering, circulation and play areas, and would be graded and constructed to meet the applicable accessibility and adaptability requirements. The project proposes to tie in with the County of Hawai'i's Kealakehe's Wastewater Treatment Plant. However, depending on timing of the agreement with the County on the sewer tie-in, a portion of the parcel may also be used for a self-contained wastewater treatment plant for wastewater generated onsite. If required, the project would use the on-site wastewater treatment plant until completion of a proposed sewer line, and the project's wastewater treatment could transition to tying in to the County of Hawai'i's Kealakehe's Treatment Plant.

Stantec collected the traffic data and coordinated the preparation and completion of the Traffic Impact Assessment Report for the project. Stantec coordinated the biological survey with a local biological subconsultant and the assessment of cultural impacts from the project with a local cultural resource firm.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant
b.	Stantec GS Inc. (formerly Cardno GS, Inc.)	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **3**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu Prime: Kennedy Jenks Consultants	Jon Honda	808-488-0477

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

For over 15 years, Stantec GS has provided stormwater monitoring and reporting services for the City and County of Honolulu.

Scope:
- NPDES MS4 permit storm water monitoring and reporting

Size: N/A

Cost $462K (2022)

Key Personnel:
- Peer Amble, Project Director
- Ben Berridge, AICP, PMP, Project Manager
- Bert Weeks, Biologist
- Hannah Hubanks, QA/QC Director
- Jennifer Miller, PMP, Deputy Project Manager

Stantec has performed stormwater samples at 75 industrial facilities throughout the island of Oahu in compliance with the City and County of Honolulu's Municipal Separate Stormwater Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit. The effort has included investigation, planning, and installation of remote water quality and atmospheric monitoring stations to collect first-flush stormwater samples according to 40 CFR 136 and EPA guidelines.

Stantec designed telemetered monitoring stations that incorporate data logged by automated sampling equipment and water quality sensors, area-velocity sensors, and pressure transducers, providing records of flow and site conditions and tracking/archiving weather. Stantec provides quality assurance and quality control (QA/QC) oversight, coordinates 24/7 on-call teams for grab/composite sample collection, maintains rainfall-runoff curves, monitors automated sampling equipment, and prepares monthly status reports.

The NPDES permit required first flush samples from the permitted facilities. Stantec faced challenges monitoring a large number of City facilities with capturing the "first flush" of significant storm events. This required staff to monitor a large number of facilities across the island during fairly short storm event periods. In order to overcome the challenges Stantec faced state of the art telemetered monitoring stations were equipped with discrete alarming systems based on site and atmospheric conditions. The alarms and the quick-moving sampling teams were able to effectively monitor several facilities during large events. In addition, a priority-based weight risk scoring system was established with State of Hawai'i Department of Health (HDOH) to determine the facilities that have the potential to have the highest impact to water quality and prioritize these facilities. The strategies allowed for a cost-effective solution to the challenges the NPDES permit requirements presented.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec GS Inc. (formerly Cardno GS, Inc.)	Honolulu, HI; Santa Barbara, CA	Key Subcontractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **4**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture (Pāhoa, Hawai'i Island, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Ormat Technologies, Inc. for Puna Geothermal Venture (PGV)	Ron Quesada	808-965-2848

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Scope:
- Environmental monitoring
- Compliance monitoring
- Community outreach

Size: N/A
Cost: $2.4M (total)
Key Personnel:
- Michele Lefebvre, PhD., Project Manager/ Biologist
- Benjamin Berridge, AICP, PMP, Program Manager/Environmental Planner
- Hannah Hubanks, Environmental Scientist
- Angel Demers, Biologist

For over a decade, Stantec GS has provided environmental monitoring services to include compliance monitoring and community outreach to Puna Geothermal Venture, in Pāhoa, Hawai'i. Compliance monitoring services include meteorology, noise, air quality, and groundwater monitoring as required by Geothermal Resource, Underground Injection Control, and Noncovered Source Permits from the State of Hawai'i Department of Health (DOH). Stantec GS manages data collection (EDAS), conducts QA/QC process for daily air quality reports, and authors semi-annual hydrological monitoring reports and monthly noise, meteorological, and air quality monitoring reports. Field activities include semi-annual groundwater sampling and calibration of meteorological monitoring equipment.

The goal of PGV's environmental monitoring program is to demonstrate PGV is in compliance with permits and is also a responsible corporate partner in the community. PGV's needs go beyond what is typically associated with compliance monitoring. Services provided through go beyond 24/7 operation and maintenance support services to include providing customized services to improve the air monitoring network, such as developing the databases that link to the monitoring stations meteorological and H2S equipment as well as the air monitoring alarm system. The Stantec GS alarm system, which was developed to alert plant operators of any fugitive H2S release, has been proven to be a valuable and reliable system that affords PGV the ability to take immediate action to mitigate potential health hazards should a release occur. Community awareness and public outreach are of prime importance to PGV, and, as such, PGV relies on Stantec GS to provide knowledgeable support based on its well-rounded understanding of PGV's operations and the community in which it operates. In addition to environmental monitoring services, Stantec GS provides community engagement support, including supporting PGV at community outreach meetings.

Stantec GS recognized the need to maintain continuous communications of the data to the website. Each station was assigned a static IP address and taken off the unreliable dial-up connection. AT&T wireless communication systems were also used as a backup at each station.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec GS Inc. (formerly Cardno GS, Inc.)	Honolulu, HI Santa Barbara, CA	Subcontractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **5**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Alternative Energy Planning Studies and Resiliency Roadmap, Pacific Missile Range Facility (Kauai, HI)	2021	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
NAVFAC Pacific	Erith M. Evans	808-474-9778

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Under a Joint Venture, Stantec GS developed a suite of engineering reports, special planning studies, and pre-NEPA environmental assessments in support of current and future resiliency requirements at PMRF Barking Sands in Kauai, Hawai'i. The studies centered around development of the PMRF Installation Energy Roadmap, a comprehensive energy planning effort that addressed current and potential future mission needs, planned PMRF infrastructure projects, and efforts necessary to enhance mission assurance through energy resiliency, operational efficiency, leveraging innovative technology, improved partnerships and strengthening infrastructure.

SCOPE OF WORK

The Installation Energy Roadmap is a structured and effective approach to selecting, prioritizing, sequencing, and implementing energy projects and programs that will result in stronger long-term installation energy and resiliency posture. The Energy Roadmap laid out the viability and sustainability of various alternative energy and energy resiliency solutions. The plan ensures available and reliable utilities, including on-site electricity generation, for the installation's critical missions and defines energy requirements to maintain mission capabilities during outage events.

The team determined the mission energy requirements, assessed resiliency gaps, and developed engineering scenarios to address the gaps. Top priority projects included combined solar photovoltaic and battery energy storage systems, and power and communication line connection/undergrounding projects at various sites on the installation. These projects were selected for further technical and financial analysis, including the creation of a cost benefit analysis tool.

To support the Energy Roadmap and PMRF's current and future resilience requirements, the team prepared numerous planning/infrastructure studies. These studies included: a Waste to Energy Facility Assessment, Resiliency Requirements Assessment, Waste Stream Analysis, Site Alternatives Assessment, Traffic Study, Soundscape Study, Glare Study, Life Cycle Cost Study, development of Alternative Energy Cost Benefit Tool, and a PMRF Installation Energy Program Summary. Two other related studies were developed and are summarized below.

Scope:

- Coastal Consistency Determinations under CZMA
- ESA Section 7 Consultations, Biological Surveys, and Biological Assessments
- Noise analysis (in-air and underwater)
- Natural Resources Surveys
- Wetland delineation and mitigation plans (wetland, near shore)
- NHPA Consultation/Cultural Resource Surveys (Architectural/Archaeological)
- Storm Water Management Studies
- Public Involvement Strategies/Planning/Implementation
- Total Ownership Cost (TOC)/Life cycle cost analysis
- Geospatial analysis/map generation
- Alternative energy feasibility studies
- Sediment characterization studies
- Hydrology/Erosion studies
- Utility capability assessments/ feasibility studies (electric, gas, sewer, water)
- Traffic Studies/Transportation analysis/Roadway designs

ize N/A

Cost: $2.1M

Key Personnel:

- Peer Amble, Project Director
- Jennifer Miller, Project Manager
- Ben Berridge, AICP, PMP, Hawai'i Office Manager
- Boyd Dixon, RPA, Archaeologist

The team prepared a Sea Level Rise Vulnerability Study, which assessed the vulnerability of PMRF to permanent inundation and temporary flooding from sea level rise and storm surges using selected projections for the years 2035 and 2065 and customized GIS data modeling.

- Developed site-specific sea level rise mapping using two different time horizons, vulnerability and risk assessment, and the development of high-level adaptation strategies to address the vulnerabilities/resilience gaps.
- Identified key vulnerabilities to critical structures and facilities.

- Developed potential concept-level adaptation strategies to be translated into projects to address resiliency requirements.
- Organized and ran two stakeholder meetings with adjacent landowners, municipalities, and state agencies to share information about the project and to learn about other similar efforts with the aim of future collaboration.
- Developed a funding matrix for sources applicable to the Navy, local municipalities, and other entities to seek funding for off-base strategies that would protect the base from future sea level rise impacts.

The team conducted pre-NEPA environmental studies for the priority projects, including in areas with federally protected threatened and endangered species and high cultural sensitivity. The project also addressed the level of permitting and NEPA compliance required to complete the implementation of the priority projects. Our team also prepared a consistency determination for all three alternative energy projects as part of the pre-NEPA analyses.

Additionally, the team prepared stakeholder materials, organized, and facilitated several workshops with local county and State agencies and other key entities (University of Hawai'i, Sea Grant Program, Kauai County Utilities Commission). These workshops were focused on information gathering, energy resiliency brainstorming, and briefings of PMRF energy strategies into the future. The outcome and success of these workshops was continued stakeholder trust, transparency, and involvement going forward.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Cardno GS – AECOM Pacific JV (predecessor JV to Stantec GS-AECOM Pacific JV)	Honolulu, HI; Solana Beach, Santa Barbara, CA; Charlottesville, VA	Prime Contractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **6**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Oahu, HI)	2023	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
NAVFAC Pacific	Andrea Von Burg Hall	808-472-1425

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

As a prime partner in a JV, the Stantec GS team prepared an EIS and supporting documentation for the Navy's proposed graving dry dock and waterfront production facility at JBPHH. The proposed project would replace an existing dry dock with one of sufficient size to meet current and future requirements of fast-attack submarines. The modern waterfront production facility would reduce lost operational days by increasing collaboration and efficiency among the work force. Ongoing work includes completion of the State of Hawai'i DOH Water Quality Certification, Compensatory Mitigation Plan, and the USACE individual permit.

SCOPE OF WORK

The proposed project's construction-related actions would include dredging, fill, pile driving, installation of new temporary and permanent in-water structures, demolition of existing landside structures, and construction of new temporary and permanent landside facilities. The EIS evaluated impacts to five alternatives with various support facility options and 16 resources areas including dredging and filling within a Superfund remedial action area and demolishing existing historic structures. There were three cooperating agencies including USACE, USEPA, and NMFS.

Consultation and Permitting. Major complexities included an extremely aggressive schedule, incongruency in NEPA and project design stage, stringent permitting requirements, and application of a Compensatory Mitigation Plan. The JV supported highly complex permitting and mitigation planning activities under unusually fast-paced delivery schedules. The permitting documentation was developed to meet requirements under Section 404 and Section 10, as well as Section 401 of the Clean Water Act. Accompanying mitigation planning documentation developed by the JV includes a precedent setting Compensatory Mitigation Plan with analyses and mitigation measures to minimize impacts from dredging and filling to wetlands and open water habitat within Pearl Harbor.

The team supported the Navy in solidifying a Programmatic Agreement with the Hawai'i SHPO and the ACHP to ensure mission planning for facilities and operations are implemented in a manner that minimizes harm to Pearl Harbor National Historic Landmark. The JV also supported consultations under ESA and Magnuson-Stevens Fishery Conservation and Management Act through development of endangered species act and Essential Fish Habitat Assessment and associated documentation.

These consultation documents included analyses and mitigation measures to minimize impacts to biological and benthic species within Pearl Harbor.

Scope:

- Coastal Consistency Determinations under CZMA
- ESA Section 7 Consultations, Biological Surveys, and Biological Assessments
- Noise analysis (in-air and underwater)
- Natural Resources Surveys
- Wetland delineation and mitigation plans (wetland, near shore)
- NHPA Consultation/Cultural Resource Surveys (Architectural/Archaeological)
- Storm Water Management Studies
- Public Involvement Strategies/Planning/Implementation
- Total Ownership Cost (TOC)/Life cycle cost analysis
- Geospatial analysis/map generation
- Alternative energy feasibility studies
- Sediment characterization studies
- Hydrology/Erosion studies
- Utility capability assessments/ feasibility studies (electric, gas, sewer, water)
- Traffic Studies/Transportation analysis/Roadway designs

Size: 176,800 SF Dry Dock and Waterfront Production Facility; 2,800-acre area

Cost: $7.1M

Key Personnel:

- Peer Amble, Project Director
- Ben Berridge, AICP PMP, Hawai'i Office Manager
- Jennifer Miller, PMP, Project Manager
- Boyd Dixon, RPA, Archaeologist

Public Involvement Strategies. With the onset of the COVID pandemic and inability to conduct in-person meetings, the JV used a 360-degree Virtual Stakeholder Engagement platform to foster and facilitate public engagement during the scoping and Draft EIS public comment periods. This technology allowed the public to visit the virtual space and to provide comments throughout the duration of these public engagement periods.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Cardno GS – AECOM Pacific JV (predecessor JV to Stantec GS-AECOM Pacific JV)	Honolulu, HI; Orange, San Diego, Santa Barbara, Solana Beach, CA; Charlottesville, Hampton, VA; Portland, OR	Prime Contractor
b.	Stantec Consulting Services Inc. (Parent firm)	Pasadena, CA	Permitting Support

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **7**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Assessment for the Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron, MCB Hawai'i (Kaneohe Bay, Oahu, HI)	2022	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
NAVFAC Pacific	John Bigay	808-472-1196

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

This project evaluated the Marine Corps' basing of MQ-9 and KC-130 aircraft squadrons including analysis of 21 aircraft; 3,000 MQ-9 and 5,280 KC-130J operations; 676 additional personnel plus dependents at MCB Hawai'i Kaneohe Bay; and supporting infrastructure construction on four acres. The need for the proposed action is to extend the capability, versatility, and range of the Hawai'i-based Marine Corps and other forces in support of United States – Indonesia Society USINDOPACOM.

SCOPE OF WORK

The Stantec GS team evaluated seven resource areas: noise, air quality, water resources, cultural resources, biological resources, public health and safety, and transportation. The JV coordinated a successful "heavy-lifting up-front" strategy to confirm a reasonable range of alternatives based on well-defined criteria driven by a strong purpose and need. NEPA streamlining processes were applied by using a thorough rationale to dismiss certain resources from detailed analysis, narrowing the analysis to only relevant resource areas. This process bolstered regulatory analysis, legal sufficiency, and Quality Control at each stage of the project.

Scope:

- Air Conformity analyses/modeling under CAA
- Coastal Consistency Determinations under CZMA
- ESA Section 7 Consultations, Biological Surveys, and Biological Assessments
- Noise impact studies/modeling in-air
- Natural Resources Surveys
- NHPA Consultation/Cultural Resource Surveys (Architectural/Archaeological)
- Public Involvement Strategies/Planning/Implementation
- Safety analyses (Accident Potential Zones, Clear Zones)
- Geospatial analysis/map generation
- Air/Water quality requirements
- Traffic analysis

Size: Two aircraft types/squadrons; 21 aircraft; 8,280 aircraft operations/year; 676 personnel plus families; 4 acres construction

Cost: $878K

Key Personnel:

- Peer Amble, Project Director
- Jennifer Miller, PMP, Project Manager
- Ben Berridge, AICP, PMP, Hawai'i Office Manager
- Boyd Dixon, RPA, Archaeologist
- Stephanie Clarke, GIS Specialist

National Historic Preservation Act. Several of the facilities in the APE were historic, including historic landmarks and districts eligible for listing in the National Register of Historic Places, as well as archaeological districts. Consultations involved the State Historic Preservation Division (SHPD), Native Hawaiian Organizations, interested parties, and the public regarding a determination of adverse effects to historic properties resulting from the proposed action. SHPD concurred with the Marine Corps determination that the project would result in adverse effects to the NAS Kaneohe Historic Aviation District.

ESA Section 7/Biological Assessment/Resource Surveys. ESA Section 7 consultation was required with the USFWS regarding impacts to Hawaiian waterbirds, Hawaiian seabirds, and green sea turtles via a Biological Assessment. The Marine Corps determined the proposed action "may affect but is not likely to adversely affect ESA-listed species or has no effect on ESA-listed species." USFWS concurred with the Biological Assessment and commented that it was a well-prepared consultation document. MCB Hawai'i is currently using this Biological Assessment as the example consultation document for other projects involving federally threatened or endangered species.

Coastal Consistency Determination. The proposed action falls under the Marine Corps' CZMA de minimis activities list. The JV provided guidance and support for their consultation with the State of Hawai'i Office of Planning and Sustainable Development, Planning Division who concurred with the Marine Corps' determination that the action would not result in any reasonably foreseeable direct or indirect effects to uses or resources within the Hawai'i Coastal Zone.

Traffic Analysis. A traffic analysis was conducted to assess effects resulting from construction, operation, and the cumulative effects of construction and additional personnel.
Air Quality Analyses. Led by air quality specialist Fang Yang, the JV modeled criteria pollutant emissions and GHG emissions from proposed construction activities and annual flight operations and engine maintenance.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Cardno GS – AECOM Pacific JV (predecessor JV to Stantec GS-AECOM Pacific JV)	Honolulu, HI; Santa Barbara, Solana Beach, CA; Seattle, WA; Hampton, Charlottesville, VA	Prime Contractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **8**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Engineering and Environmental Support Aunu'u, Hilo, and Laupāhoehoe Harbors (American Samoa, Northeast Hawaii Island, and East Hawaii Island)	Ongoing	TBD

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
USACE Honolulu District	Jessica Podoski	808-883-5414

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec GS Inc. supported USACE Honolulu District with surveys, design, and planning for repairs to three Harbors: Aunu'u Small Boat Harbor located in American Samoa, Laupāhoehoe Harbor located in Northeast Hawaii Island, and Hilo Harbor located in East Hawaii Island. The goal of this work is to inform future maintenance and repair strategies for harbor infrastructure to meet future sea level rise conditions. The work included: topographic survey, hydrographic (multibeam) survey, biological survey, environmental coordination support, Biological Assessment, Essential Fish Habitat assessment, conservations recommendations, Clean Water Act compliance and Coastal Zone Management Act federal consistency review, basis of design document, contract plans and specifications, and construction cost estimates.

As these harbors are in remote areas and are essential pieces of infrastructure for local residents, ensuring their functionality under changing climate conditions is paramount for their continued and future use. Analysis of the harbor structures using multiple wave modeling simulations informed the effectiveness of designs for repairs and maintenance. With the incorporation of sea level rise projections, multiple scenarios of wave strength and water height are used to determine the harbors' climate vulnerability.

Aunu'u Small Boat Harbor, American Samoa: Federal navigation features at Aunu`u Small Boat Harbor consist of an entrance channel; turning basin; 240-foot long northern revetted mole; 200-foot-long wave absorber; 90-foot-long stub breakwater; 220-foot long southern revetted mole; and mooring area. Repairs to the wave absorber were last completed in November of 2013. The repair project scope includes vegetation removal, stone resetting/replacement, and removal of a sunken vessel within the channel limits that has been there for up to 15 years.

KEY RELEVANCE

Scope:

- Required understanding of local planning and engineering requirements
- Benthic communities - topographic, hydrographic (multibeam), and biological surveys
- Biological Assessment
- Essential Fish Habitat
- Land and Infrastructure
- USACE planning principles as contained in 42 U.S. Code § 1962-3 – Water resources principles and guidelines and further detailed in Engineering Regulation (ER) 1105-2-100 in the development of Federal water resources projects
- Applying a systems approach and integrated water resources planning

Size: Varied

Cost: $1.38M

Key Personnel:

- Ben Berridge, AICP, PMP, Project Manager
- Bert Weeks – Marine Biologist
- Christine Chaplin, GISP – Sr. GIS Analyst
- Angelica Demers – Biologist
- Hannah Hubanks – Environmental Scientist / Health Safety Coordinator

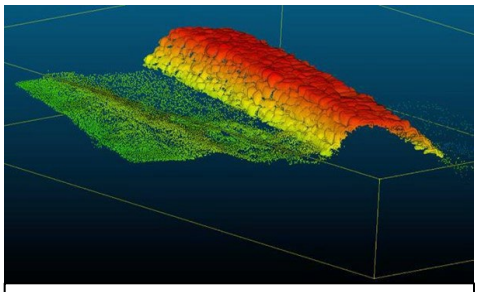
Stantec GS Inc. and Sea Engineering conducted a topographic survey, hydrographic (multibeam) survey, biological survey (option item), and environmental coordination support including Biological Assessment, Essential Fish Habitat Assessment, conservations recommendations, Clean Water Act compliance and Coastal Zone Management Act federal consistency review for the proposed project.

County of Hawai'i

Hilo Deep Draft Harbor, HI: The original project at Hilo Harbor was completed in 1930 and consisted of a 10,062-foot-long breakwater protecting a 35-foot-deep basin. The Stantec GS Inc./Sea Engineering team conducted a multifaceted analysis to optimize future repair strategies from an economic investment standpoint, as well as to incorporate evaluation of risk of failure and reliability-based design under projected future forcing conditions. The project provided an in-depth analysis of the breakwater's performance and armor stone stability under present and future wave conditions and rising sea levels, using high resolution three-dimensional computational fluid dynamics models. Ultra-near-field Computational Fluid Dynamics (CFD) models were generated using one of five Engineer Research and Development Center (ERDC) DoD Supercomputing Resource Centers (DSRCs) operated by the DoD High Performance Computing Modernization Program (HPCMP). The modeling results were used for the implementation of a reliability analysis, to assess past, present, and future performance and identify zones of potentially threatened stability of the breakwater. Hilo Harbor is one of only two commercial harbors serving the island of Hawai'i and is utilized by the U.S. Coast Guard, cruise ships, barging and shipping companies, as well as recreation. Damage to the breakwater could result in a significant disruption in harbor usage until repairs can be completed. This project gives the USACE guidance on locations of vulnerabilities so they can be prepared to perform repairs quickly to get the harbor functioning again following a damaging event. This novel technique was developed in response to the needs of this project and has potential for evaluating structure stability in other locations.

Deliverables included a Basis of Design document (including identification and prioritization of repair areas), Value Engineering Study on the Basis of Design Document, 100% design contract plans and specifications, construction cost estimates, biological survey, and environmental coordination support including Pac-SLOPES verification form, Biological Assessment, Essential Fish Habitat Assessment, conservations recommendations, Clean Water Act compliance and Coastal Zone Management Act federal consistency review. The team then provided conceptual alternatives for future repair design and developed Class 4 cost estimates.

Laupāhoehoe Small Boat Harbor, HI: Laupāhoehoe Harbor was constructed 1988, providing for a 204-foot-long breakwater constructed of dolosse, a cellular concrete rib cap and reinforced concrete piles; a 57- foot-long stone wave absorber; a 9.5-foot MLLW deep entrance channel; and a 7.5-foot MLLW deep turning basin.



LiDAR topography and bathymetry

The Stantec GS Inc./Sea Engineering team prepared Basis of Design document, 100% design contract plans and specifications, construction cost estimates, biological survey, and environmental coordination support including Biological Assessment, Essential Fish Habitat Assessment, conservations recommendations, Clean Water Act compliance, Coastal Zone Management Act federal consistency review, Pac-SLOPES verification, and Water Quality Monitoring Plan.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI Hilo, HI	Prime Contractor
b.	(1) FIRM NAME Stantec GS Inc. (formerly Cardno GS, Inc.)	(2) FIRM LOCATION *(City and State)* Honolulu, HI Santa Barbara, CA	(3) ROLE Prime Contractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **9**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
100 Resilient Cities (100RC) Technical Support to Honolulu Assessment of Ala Wai Flood Mitigation Project (Honolulu, HI)	2018	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu Office of Climate Change Sustainability & Resiliency	Matthew Gonser	(808) 748-2262

The City and County of Honolulu (CCH), State of Hawai'i, and the U.S. Army Corps of Engineers (USACE) Honolulu District are currently reviewing design features and negotiating terms of the partnership agreement with the State, County, and City of Honolulu for the construction of the Ala Wai Watershed Flood Mitigation Project.

The primary objective of the proposed project is to reduce flood risk in Manoa, Palolo, Waikiki, and parts of Makiki and Mo'ilili neighborhoods. The estimated population at risk included approximately 65,000 residents and an additional 200,000 transient daily visitors. An estimated 3,000 structures are at flood risk to a one percent (a 100-year event) probable storm event, with potential damages exceeding $1B. The project features include:

- Six debris/detention basins in upper reaches of Maikiki, and Palolo streams
- One in-stream debris catchment structure
- Three multi-purpose detention basin
- Flood Control Elements along the Ala Wai Canal
- Flood warning system (non-structural)
- Fish and wildlife mitigation (non-structural)

KEY RELEVANCE

Scope: Climate change, resiliency, and sustainability, flood mitigation, environmental, hydraulics, landscape architecture, flood control
Size: N/A
Cost: $100M+ (construction)
Key Personnel:
- John Malueg, Technical SME

Through the auspices of the 100RC, The CCH retained Stantec on a pro-bono basis to review the proposed USACE FS study level designs and provide general support services to the City with respect to develop conceptual alternative designs/adjustments to existing designs for potential inclusion in the USACE's Ala Wai Canal Food Risk Mitigation project. General support included assisting the City identify opportunities for place-making. Increased community use and acceptance, enhancing the local economy, achieving improvements in the environment while achieving (or expanding) the project's flood mitigation focus. More specific scope tasks included assisting the City identify opportunities to quantify (monetize) the flood risk mitigation, social, economic, and environmental benefits achieved by proposed new or modified key project elements, particularly in terms of USACE recognition of in-kind local contribution to the Project. Analysis provided included consideration of impacts to overall project costs, feasibility, permutability, constructability and schedule. Our team worked closely with the CCG Department of Design and Construction to focus on features of greater interest to the community and produced multiple alternatives for design and location of canal areas and walls and levees, inclusion of park areas, incorporation of ongoing complete streets planning, CCH goals for multi-modal transport. Concepts were also provided for greening and increased safety for middle and upper watershed Project features. We also provided alternative conceptual designs to increase normal and higher frequency flood flows diversion of the Manoa-Palolo Stream through the Ala Wai Golf course to provide water treatment of stream water before its return to the canal at point further east of current junction that will provide water quality benefits to the canal itself.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **10**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lahaina Watershed Flood Protection Project (Lahaina, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui Department of Public Works	Ty Takeno	(808) 270-7745

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The Lahaina Watershed Flood Protection Project, previously known as the Lahaina Watershed Flood Control Project, has been over forty years in the making. A portion of the project (30%) has been constructed, and funding is now in place to conduct the engineering and environmental planning needed to complete the remaining planned works. To continue, the project must complete a supplemental watershed plan – the Supplemental Plan Environmental Document (ED). The Supplemental ED is due to significant watershed changes (largely due to the construction of the Lahaina Bypass) since the project's Environmental Impact Statement (EIS), which was completed in 2003.

KEY RELEVANCE

Scope:
- Flood preparedness
- NEPA/HEPA environmental review

Size: 5,250 acres
Cost: $1.4M
Key Personnel:
- Sherry Campagna, Project Manager
- John Nelson, Technical Lead for Nature Based Solutions
- Sarah Troedson, Senior GIS Analyst

Our team is completing the Lahaina Watershed Flood Protection Project Supplemental Plan Environmental Document. This project involves the development of a Natural Resource Conservation Service (NRCS), National Environmental Policy Act (NEPA), and Hawai'i Environmental Policy Act (HEPA) compliant Supplemental Plan Environmental Document (ED) to evaluate watershed protection measures within the Lahaina Watershed. The proposed project is intended to mitigate for flooding and reduce the impacts of sedimentation.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant
b.	Stantec GS Inc. (formerly Cardno GS, Inc.)	Honolulu, HI	Prime Consultant

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN EXAMPLE PROJECT	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Sheryl Campagna	Senior Environmental Planner/ Community Engagement Lead	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒
John Malueg	Sustainability and Resiliency Planning	☒	☐	☐	☐	☐	☐	☐	☐	☒	☐
Sarah Troedson	Senior GIS Analyst	☒	☐	☐	☐	☐	☐	☐	☐	☐	☒
Michele Lefebvre, Ph.D.	Environmental Scientist	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐
Tricia Dang	Environmental Planner	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒
John Nelson	Senior Environmental Planner	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒
Peer Amble	Environmental Planner	☐	☐	☒	☐	☒	☒	☒	☒	☐	☐
Benjamin Berridge, AICP, PMP	Environmental Planner	☐	☐	☒	☒	☒	☒	☒	☒	☐	☐
Jennifer Miller, PMP, LEED AP	Environmental Planner	☐	☐	☒	☐	☒	☒	☒	☐	☐	☐
Hannah Hubanks	Environmental Scientist	☐	☐	☒	☒	☐	☐	☐	☒	☐	☒
Bert Weeks	Biologist	☐	☐	☒	☐	☒	☐	☐	☒	☐	☐
Boyd Dixon, RA	Archaeologist	☐	☐	☐	☐	☒	☒	☒	☐	☐	☒
Stephanie Clarke	GIS Specialist	☐	☐	☒	☐	☐	☒	☒	☐	☐	☐
Jessica Hawkins	Biologist	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Angelica Demers	Biologist	☐	☐	☒	☒	☐	☐	☐	☒	☐	☐
Christine Chaplin, GISP	GIS Specialist	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐
Benjamin Barna, PhD, RPA	Senior Archaeologist	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Hawai'i Green Growth Ala Wai Watershed Collaboration	6	EIS for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH

County of Hawai'i

2	Kaloko Affordable Housing Project HRS 343 and HUD NEPA, EAs	7	EA for the Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron, MCB Hawai'i
3	City and County of Honolulu NPDES MS4 Monitoring	8	Engineering and Environmental Support Aunu'u, Hilo, and Laupahoehoe Harbors
4	Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture	9	100 Resilient Cities Technical Support to Honolulu Assessment of Ala Wai Flood Mitigation Project
5	Alternative Energy Planning Studies and Resiliency Roadmap, Pacific Missile Range Facility	10	Lahaina Watershed Flood Management Project

The Stantec Advantage

Stantec empowers clients, people, and communities to rise to the world's greatest challenges at a time when the world faces more unprecedented concerns than ever before.

We are a global leader in sustainable engineering, architecture, and environmental consulting. Our professionals deliver the expertise, technology, and innovation communities need to manage aging infrastructure, demographic and population changes, the energy transition, and more.

Today's communities transcend geographic borders. At Stantec, community means everyone with an interest in the work that we do—from our project teams and industry colleagues to our clients and the people our work impacts. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure.

We are designers, engineers, scientists, project managers, and strategic advisors. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at Stantec.com or find us on social media.

The Stantec community unites more than 32,000 employees working in over 450 locations • We collaborate across disciplines and industries to bring buildings, energy and resource, and infrastructure systems to life. Our work—professional consulting in planning, engineering, architecture, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. With thousands of employees on six continents, Stantec offers a global team of program managers, business consultants, engineers, geologists, operators, scientists, technologists, and regulatory experts who provide solutions to the world's most challenging projects.

One Stantec team • Stantec Consulting Services Inc. and Stantec GS Inc. staff collaborate as one united Stantec team. Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan. Cardno GS, Inc., now known as Stantec GS Inc., was acquired by Stantec on December 6, 2021. Since 1989, Stantec GS Inc. has provided environmental, A-E, and other asset management services for our clients in Hawai'i. Stantec GS Inc. is an operating division of Stantec Inc. and has historically focused on meeting the needs of our municipal, state, federal agency, and commercial clients.

Global resources with island attitude • We have an 72-person strong Honolulu operations team with our principal office located in American Savings Bank Tower of Bishop Park, as well as 21 additional staff in the Stantec GS Inc. Honolulu office. Stantec has been working in Hawai'i supporting our community on projects, including working with the Environmental Services Department (ENV) on the Phase 2 Expansion for Sand Island Wastewater Treatment Plant; working with the Office of Climate Change, Sustainability, and Resiliency together with Department of Design and Construction (DDC) on integrating greener and community friendly alternatives into the proposed Ala Wai Flood Mitigation project; construction management for the HART Honolulu Rail Transit Project; harbors master planning for HDOT as a subconsultant; environmental impact assessments for government and commercial clients; mapping for the County of Hawai'i; and risk and resiliency planning for County of Maui. From environmental assessments on Hawai'i island to remedial investigations in the Northwest Islands (Wake) we have staff in multiple disciplines working throughout Hawai'i. We believe that creating a team that engages the right people is key to project success. Our team offers local expertise through our local staff on Oahu, Maui, and Hawai'i Island, along with relevant support staff and subject matter experts in Western United states—plus all the 32,000+ professionals in our global Stantec network. This gives us the flexibility to respond to any project challenge in a timely and efficient manner to keep your projects on track. We have the diverse experience necessary to tackle even your most unique challenges.

We have approached this submittal in a way that we believe provides the City and County of Honolulu with information on the depth and breadth of our capabilities, as well as information on specific projects and staff. We understand that in doing this, Section G of this form may not demonstrate the overlap, we would usually present in a direct RFQ. Staff relatively new to Stantec bring a wealth of technical experience and in several cases experience in Hawai'i with other firms. Another important feature of Stantec is our proven track record of integrating multiple disciplines into projects; it's all a part of designing with communities in mind and ensuring projects achieve all potential benefits.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Stantec is a national leader in all aspects of community and environmental planning • We integrate this expertise with all of our service areas presented below.

Community Development

- Master Planning
- Urban Design
- Landscape Architecture
- Design Visualization
- Stakeholder Consultation
- Brownfield Redevelopment
- Civil Engineering
- Master Servicing Plans
- Watershed Studies
- Stormwater Management
- Earthworks Analysis/ Lot Grading Design

Environmental Services

- Brownfields Assessment and Remediation
- Site Investigation and Remediation
- Risk Assessment
- Assessments, Permitting, and Compliance
- Ecosystem Restoration
- Groundwater Resources Management
- Archaeology and Heritage Resources

Survey/Geomatics

- Boundary and Cadastral Surveys
- Topographic Mapping
- Construction Stakeout
- Geodetic and Control Surveys
- As-Built Surveys
- 3D Laser Scanning

Geotechnical Engineering

- Subsurface Explorations
- Foundation and Retaining Systems
- Geotechnical Lab Testing
- Materials Investigations
- Seepage Analysis/ Dewatering Studies
- Slope Stability Analysis
- Settlement Analyses

Water

- Municipal and Industrial Water and Wastewater Treatment
- Water Supply, Storage Facilities and Distribution Systems
- Water and Wastewater
- Pumping Stations
- Linear Infrastructure Design
- Wastewater Reclamation and Reuse
- Wet Weather Flow Management

Transportation Planning and Traffic Engineering

- Transportation Master
- Planning/Modeling
- Travel Forecasting
- Traffic Impact Assessments
- Access Management
- Traffic Calming Solutions
- Safety Assessments

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Environmental Planning

Our team is diverse-not only do we help the communities we live and work in create big picture plans, but we also provide the supporting services to fulfill environmental review requirements and get those plans implemented. We routinely prepare environmental documents and guide our clients through regulatory processes from local to federal agencies to achieve permit issuance and project implementation. We do this for both public and private clients on everything from small residential projects to large-scale utility projects and all types in between and in all types of land and regulatory environments. Our team of scientists and issue-area experts can cover all of the environmental impact issue areas from air quality and biology to historic preservation and geology. We have experience performing environmental impact assessments and documents pursuant to Chapter 343 of the Hawai'i Revised Statutes (HRS) and the National Environmental Policy Act for a variety of projects throughout the Islands.

Our team has the experience and qualifications to assist in tailoring an outreach process which engages stakeholders and desired constituencies. Engagement efforts are tailored to the goals of each client and to address differences between communities and institutions.

Stantec takes a proactive approach to the public involvement process specifically to encourage the participation of everyone with a potential interest in a project. Our public involvement team is highly skilled in the planning and facilitation of public meetings, and has successfully facilitated meetings for environmental justice communities, diverse groups of stakeholders, and the general public. Utilizing our extensive media capabilities, we have also coordinated with clients to create comprehensive packages of public involvement materials including meeting advertisements and signage, newsletters, websites, videos, 3-D visualization tools, and other educational materials.

Stantec has led hundreds of public involvement and community visioning projects that have generated community consensus. Throughout our public involvement process, innovative communication tools and techniques, such as a computer simulation and 3-D visualization, are employed as a means of building consensus. As needed, Stantec tailors outreach materials, such as newsletters, interactive web pages, public displays, briefing books, and video materials to the circumstances of each project, providing important information regarding the project process and goals to affected communities, stakeholders, and the public. The result is a more engaged and involved stakeholder base that will build public acceptance for your projects.

Environmental planning involves many disciplines and Stantec is proud to offer our expertise in these areas:

Cultural Resources

- Archaeological surveys
- Cultural resources overview studies and management plans
- National Register assessment and nomination programs and historic building studies

Environmental Impact Assessment

- Air and noise studies
- Comprehensive data gathering
- Documentation through environmental impact statements and supporting studies
- Community involvement plans
- Geospatial and Geoinformation systems and Remote Sensing Data capabilities to include fixed wing, rotary, and UAS services

Natural Resources

- Biological/ecological studies, including endangered species habitat analysis
- Wetlands delineation and mitigation

Planning Documentation

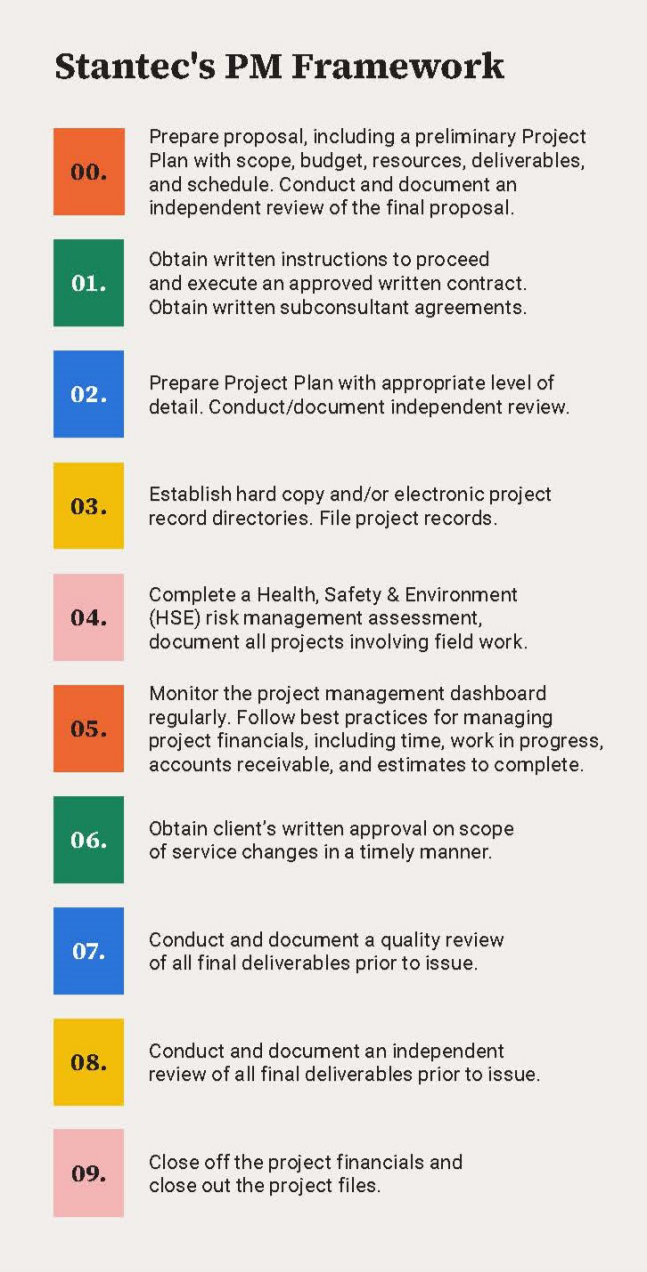
- Climate change studies
- Economic feasibility studies
- Environmental baseline surveys and site selection
- Master planning for phased construction
- National Environmental Policy Act (NEPA)

Public Involvement

- Strategic communications, consultation, and Public Involvement Plans
- Virtual public meeting hosting, facilitation, logistics, and technical implementation
- Online engagement materials and tools, and marketing/event surveys
- Risk communication and public meeting training/workshops
- Public meeting/hearing/workshop planning and facilitation
- Fact sheets, brochures, external and internal newsletters, copy writing, posters, presentations, and illustrations
- Press releases, media advisories, crisis communications, media relations, and media monitoring
- Public meeting materials, briefings, and Frequently Asked Questions
- Exhibit booths, site tours, materials, and events planning
- Websites, speech and script development, videos, podcasts, social media

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED



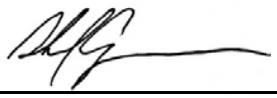
Stantec Quality Management

We are committed to improving project execution, product quality, and reducing quality related costs. We have a formal quality management system in use across the organization that is registered to the ISO9001:2015 Quality Management standard. ISO 9001:2015 is an internationally recognized standard for quality management and has been adopted by Stantec to reduce risk and consequences of design errors, improve productivity and efficiency, promote the quality and reliability of our services, improve the financial performance, increase client confidence, and support regulatory compliance. We hold not one, but three ISO certifications, Quality, Environment, and Information Technology—together they form our Integrated Management System. The Stantec Project Management Framework on the left identifies the key tasks—requirements of our ISO 9001 Quality Management System—that will help you and your project team manage risks and quality on a typical project.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at **stantec.com** or find us on social media.

On the following pages, we have included SF330 Part II forms for Stantec Consulting Services Inc. and Stantec GS Inc. Honolulu offices and additional offices listed that would work for the County of Hawai'i. Additional Part II forms can be provided upon request.

I. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.

31. SIGNATURE	32. DATE
	June 30, 2025

33. NAME AND TITLE
Sheryl Campagna, Senior Environmental Planner

PROFESSIONAL SERVICE PROVIDER QUALIFICATIONS	1. SERVICE CATEGORY OF INTEREST OS.1) Ecology, OS.3) Forestry (Watershed Management), OS.5) General Natural Resources Management and Biological Sciences Series, OS.9) Soil Conservation

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2016	YV48PGRUGZN1

2b. STREET	5. OWNERSHIP
1001 Bishop Street, Suite 1501	a. TYPE: **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Honolulu	HI	96813-3429	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Tina Moschetti - Vice President, Transportation	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(559) 492 4164	Tina.Moschetti@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	9
05	Archaeologist	691	0
06	Architect	1335	11
07	Biologist	421	3
08	CAD Technician	1218	1
12	Civil Engineer	4207	9
14	Computer Programmer	1375	1
15	Construction Inspector	350	1
16	Construction Manager	331	9
21	Electrical Engineer	1216	6
23	Environmental Engineer	854	1
24	Environmental Scientist	1764	2
27	Foundation/Geotechnical Engineer	686	0
37	Interior Designer	285	1
38	Land Surveyor	393	2
42	Mechanical Engineer	1360	0
47	Planner, Urban/Regional	956	3
48	Project Manager	2079	10
57	Structural Engineer	1289	2
58	Technician/Analyst	2017	4
	Other Employees	2600	0
	Total	**31644**	**75**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
A06	Airports; Terminals and Hangars; Freight Handling	10
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
C16	Construction Surveying	7
C18	Cost Est, Cost Eng and Analy; Para Costing; Frcst	6
E09	EIS, Assessments of Statements	10
E10	Environmental and Natural Resource Mapping	7
E11	Environmental Planning	10
G04	GIS Services; Devel, Analysis , and Data Collection	6
G05	Geospatial Data Conv: Scan, Digitizing, Comp	5
H01	Harbors; Jetties; Piers, Ship Terminal Facilities	9
H09	Hospital & Medical Facilities	10
I05	Interior Design; Space Planning	8
L02	Land Surveying	9
M05	Military Design Standards	8
R03	Railroad; Rapid Transit	10
R11	Rivers; Canals; Waterways; Flood Control	8
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
S11	Sustainable Design	6
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 27, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(if any)*

PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec GS Inc. – Honolulu, HI Branch Office	2022	P4FGL9JCNRM9

2b. STREET	5. OWNERSHIP
737 Bishop Street Suite 3050	a. TYPE Corporation

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Honolulu	HI	96813	N/A

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a. is a branch office)*
Benjamin Berridge, Office Manager	Stantec GS Inc.

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
808.528.1445	benjamin.berridge@stantecgs.com

8a. FORMER FIRM NAME(S) (If any)	8b. YR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno GS, Inc.	2014	P4FGL9JCNRM9
TEC Inc., Cardno TEC, Inc.	1989	61-160-3457

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
01	Acoustical Engineer	2	
05	Archaeologist	12	3
06	Architect	8	
07	Biologist	13	4
10	Chemical Engineer	2	
11	Chemist	3	
12	Civil Engineer	19	1
16	Construction Manager	4	
18	Cost Engineer/Estimator	3	
19	Ecologist	4	
20	Economist	2	
21	Electrical Engineer	4	1
23	Environmental Engineer	9	
24	Environmental Scientist	32	3
29	GIS Specialist	13	2
30	Geologist	3	
42	Mechanical Engineer	9	
47	Planner: Urban/Regional	40	2
58	Technical/Analyst	59	2
	Information Mgmt. Specialist	16	
	Regulatory Specialist	19	2
	Other Employees	36	
	Total	**312**	**21**
48	Project Manager (subset of other disciplines)	[104]	[8]

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
C14	Conservation and Resource Management	3
C15	Construction Management	1
E01	Ecological & Archeological Investigations	1
E07	Energy Conservation; New Energy Sources	1
E09	Environmental Impact Studies, Assessments or Statements	5
E10	Environmental and Natural Resource Mapping	2
E11	Environmental Planning	4
G04	GIS Services: Development, Analysis, and Data Collection	1
H01	Harbors; Jetties; Piers, Ship Term. Facilities	3
P06	Planning (Site, Installation, and Project)	1
S10	Surveying; Platting; Mapping; Flood Plain Studies	2
S11	Sustainable Design	2
W02	Water Resources; Hydrology; Ground Wtr.	3

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS
(Insert revenue index number shown at right)

a. Federal Work	5
b. Non-Federal Work	3
c. Total Work	**6**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,00 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
Willi Halperin	February 20, 2025

c. NAME AND TITLE

William Halperin, President

STANDARD FORM 330 (REV. 7/2021)

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2014	FNEGRHN33PH5

2b. STREET	5. OWNERSHIP
200 East Carrillo Street, Suite 101	a. TYPE: **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Santa Barbara	CA	93101-2137	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Derek Rapp - Senior Principal	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(805) 308-9166	Derek.Rapp@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno, Inc.; Stantec Consulting Services Inc. (Calle Cesar Chavez)	1945; 2022	GUKRR2AGNAA3; GUKRR2AGNAA3

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	3
05	Archaeologist	691	3
06	Architect	1335	0
07	Biologist	421	8
08	CAD Technician	1218	0
10	Chemical Engineer	455	0
12	Civil Engineer	4207	10
14	Computer Programmer	1375	1
15	Construction Inspector	350	0
20	Economist	80	1
21	Electrical Engineer	1216	0
23	Environmental Engineer	854	1
24	Environmental Scientist	1764	6
27	Foundation/Geotechnical Engineer	686	0
38	Land Surveyor	393	5
42	Mechanical Engineer	1360	0
47	Planner, Urban/Regional	956	1
48	Project Manager	2079	4
57	Structural Engineer	1289	0
58	Technician/Analyst	2017	0
	Other Employees	2681	0
	Total	**31644**	**43**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
A06	Airports; Terminals and Hangars; Freight Handling	10
C07	Coastal Engineering	7
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
C16	Construction Surveying	7
E02	Educational Facilities; Classrooms	10
G01	Garages, Vehicle Maint. Facilities, Parking Decks	8
G03	Geodetic Surveying: Ground and Airborne	4
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H09	Hospital & Medical Facilities	10
H10	Hotels; Motels	8
H11	Housing (Residential, Multi-Family, Apts, Condos)	10
L02	Land Surveying	9
R04	Recreation Facilities (Parks, Marinas, Etc.)	8
R11	Rivers; Canals; Waterways; Flood Control	8
S04	Sewage Collection, Treatment, and Disposal	10
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
S13	Storm Water Handling & Facilities	9
T03	Traffic & Transportation Engineering	10
T04	Topographic Surveying and Mapping	6
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: **June 27, 2025**

c. NAME AND TITLE: **Sarah A. McIlroy - Vice President, US Pacific**

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2004	DDVXV3MZF446

2b. STREET	5. OWNERSHIP
One West Fourth Street Suite 820	a. TYPE: **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Winston-Salem	NC	27101-3818	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Linda Pass - Senior Associate	

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS	
(336) 276-1617	Linda.Pass@stantec.com	**Stantec Inc.**

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	0
05	Archaeologist	691	0
06	Architect	1335	1
07	Biologist	421	0
08	CAD Technician	1218	1
10	Chemical Engineer	455	0
12	Civil Engineer	4207	6
14	Computer Programmer	1375	0
15	Construction Inspector	350	0
21	Electrical Engineer	1216	0
23	Environmental Engineer	854	0
24	Environmental Scientist	1764	0
27	Foundation/Geotechnical Engineer	686	0
30	Geologist	329	1
38	Land Surveyor	393	9
42	Mechanical Engineer	1360	0
47	Planner, Urban/Regional	956	0
48	Project Manager	2079	7
57	Structural Engineer	1289	1
58	Technician/Analyst	2017	0
	Other Employees	2432	0
	Total	**31644**	**26**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C15	Construction Management	10
C16	Construction Surveying	7
I03	Industrial Waste Treatment	8
L02	Land Surveying	9
R04	Recreation Facilities (Parks, Marinas, Etc.)	8
S04	Sewage Collection, Treatment, and Disposal	10
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
S13	Storm Water Handling & Facilities	9
T03	Traffic & Transportation Engineering	10
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 27, 2025**

c. NAME AND TITLE

Amy Campbell - Vice President, Regional Leader US South

Wastewater

County of Hawai'i

ARCHITECT-ENGINEER QUALIFICATIONS

PART I - SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

County of Hawai'i

2. PUBLIC NOTICE DATE	3. SERVICE CATEGORY
June 30, 2024	Wastewater

B. CONTRACT ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Sarang Agarwal, PE, Project Manager/Project Lead

5. NAME OF FIRM

Stantec Consulting Services Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
808-490-2969	N/A	sarang.agarwal@stantec.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors)

	(check)			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUBCON-TRACTOR			
a.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	1001 Bishop Street, Suite 1501 Honolulu, HI 96813-6461	Wastewater
b.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	2999 Oak Road, Suite 800 Walnut Creek, CA 94597-2054	Wastewater
c.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	300 North Lake Avenue, Suite 400 Pasadena, CA 91101-4169	Wastewater
d.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	410 17th Street, Suite 1400 Denver, CO 80202-4427	Wastewater
e.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	601 SW Second Avenue, Suite 1400 Portland, OR 92704-3128	Wastewater
f.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	2890 East Cottonwood Parkway, Suite 300 Salt Lake City, UT 84121-7283	Wastewater
g.	x			Stantec Consulting Ltd. ☒ CHECK IF BRANCH OFFICE	25 Street SE Calgary AB T2A 7H	Wastewater

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sarang Agarwal, PE	Honolulu-Based Project Lead	9	9

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Civil Engineering (Water/Wastewater) BS, Civil Engineering	Professional Engineer (TX)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Sarang is a Professional Engineer with a Master of Science in Civil Engineering from Texas A&M University, College Station, specializing in Water/Wastewater Treatment. Sarang has been an indispensable team member in providing services for projects such as the Kingwood Central Wastewater Treatment Plant Improvements Project and Barry Rose Wastewater Treatment Plant Improvements Project. Sarang's responsibilities have included condition assessment for different facilities, hydraulic and process calculations, and Biowin modelling for various treatment plants, preparing design drawings and specifications, and developing quantity and cost estimates. Sarang has worked on various wastewater treatment plants in Houston region, touching all aspects of treatment plant including lift stations, headworks, secondary treatment, disinfection, and sludge handling facilities.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Secondary Treatment Phase 2 (Honolulu, HI)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In a joint venture with RMTC, Sarang serves as project engineer for Phase 2 of the expansion, which will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. **Size**: 90 MGD **Cost:** $1.5B **Role:** Stantec Project Engineer

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Kingwood Wastewater Treatment Plant Improvements (Houston, TX)	2017	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Kingwood Central WWTP is a 7 MGD average and 37 MGD peak flow facility. The project included improvements to tertiary filtration, solids facility and UV channel improvements. Project also including floodplain analysis and mitigation improvements at the site. Sarang provided general engineering support, detailed design drawings and designed solids facility with new belt filter press, polymer feed system and conveyors. Sarang also supported the project during construction phase. **Size:** 37 MGD **Cost:** $3.5M **Role:** Project Engineer

c.

(1) TITLE AND LOCATION *(City and State)*

Barry Rose Wastewater Treatment Plant Expansion (Pearland, TX)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Barry Rose WWTP is undergoing an expansion going from 3.1 MGD to 8.5 MGD, decommissioning of Longwood WWTP and transfer of flows to Barry Rose. Project included service area analysis and modelling, alternative evaluation between MBR and SBR technologies, preliminary design for selected MBR option and exploration of future reuse capabilities. Sarang's responsibilities included design of influent lift station, headworks facility, tertiary filtration, solids facility and engineering support on other treatment processes. Sarang developed site development plans, health and safety plans, life cycle cost estimates and performed condition assessment. Sarang was also responsible for calculations for different process areas, Biowin modelling for the treatment systems and preparing preliminary engineering report and preliminary drawings. **Size:** 8.5 MGD **Cost:** $10M **Role:** Project Engineer.

d.

(1) TITLE AND LOCATION *(City and State)*

Lift Station Renewal and Replacement (FY-14) (Houston, TX)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2018	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: The project included final design for City of Houston Fiscal Yar 2014 Lift Station Improvements. This included rehabilitation of four lift stations (Westmont - 7 MGD, Northshore - 15 MGD, Maxey Rd. - 16 MGD and Mesa Dr. - 1.55 MGD), decommissioning of one lift station (East ten park - 1 MGD) and design for one new lift station (East ten park - 1.55 MGD) . Project also included a 30-inch gravity sewer main. Sarang's responsibilities include being design engineering lead for civil and mechanical design, performing hydraulic calculations, coordination with different disciplines and subcontractors, preparing final design drawings and specifications, and coordination with permitting. The estimated construction cost for the project is $12.5M. **Size:** Five lift stations and a 30-inch gravity sewer main **Cost:** $12.5M **Role:** Project Engineer

e.

(1) TITLE AND LOCATION *(City and State)*

Hurricane Harvey Disaster Cost Recovery for Wastewater Treatment Plant (Houston, TX)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2019	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☐ Check if project performed with current firm

Scope: The project included assessment of four different wastewater treatment plants after Hurricane Harvey for City of Houston and preparation of reports for FEMA cost recovery. Sarang's responsibilities included evaluation of existing asset inventory (InforEAM), conduct site visits to perform asset conditions and preparing damage assessment reports and associated cost estimates. The following treatment plants were included - Kingwood Central WWTP (37 MGD), Imperial Valley WWTP (9.7 MGD), WCID 47 WWTP (20.1 MGD) and Forest Cove WWTP (3.8
MGD). **Size:** N/A **Cost:** N/A **Role:** Project Engineer

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Bob Armstrong, PE	Water/Wastewater Lead/Contract Manager	39	12

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Civil Engineering	Professional Engineer (HI, CO – Civil)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Bob Armstrong has 37 years of diverse analytical, scientific, and environmental engineering experience. This includes wastewater transmission, pumping, and treatment systems' design and construction on both the liquids and solids streams. His experience also extends to team building; large, complex team management; and operations leadership. Bob has worked on the Hawaiian Islands since 1991**.**

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Sand Island Wastewater Treatment Plant (SIWWTP) Secondary Treatment Phase 2 (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In a joint venture with R.M. Towill (RMTC), Bob currently manages Phase 2 of the expansion which will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. The project also includes major consideration for sea level rise and climate change resiliency **Size:** 90MGD • **Cost:** $1.5B • **Role**: RMTC/Stantec JV Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Phase 1 Secondary Treatment Upgrades 3rd Party Review and Value Engineering Workshop (Honolulu, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: As a subconsultant to RMTC, Bob led the Stantec team in the detailed review of the design (by others) of Sand Island's Phase 1 Secondary Treatment Facilities Upgrades Project. The team also conducted a five day Value Engineering (VE) workshop at the 60% design level. The Third Party review involved close coordination across all disciplines within the R.M. Towill/Stantec team as well as interface with the lead design consultant and key City and County of Honolulu Water Engineering and Construction (WEC) and operations staff. Over 5,000 design items were addressed, many in a repetitive or iterative process, over the 30/60/90/100% review cycles, which generated over 3,000 review comments. VE produced 88 ideas for value enhancement, with an approximate value of $83M. The ideas carried forward by the designer resulted in an overall impact to the bottom line on the order of approximately $23M. The March 2020 through March 2021 SIWWTP Phase 1 Secondary Treatment Upgrades 3rd Party Review and Value Engineering Workshop effort provided a cohesive R.M. Towill/Stantec team to uniquely gain in-depth and detailed knowledge and understanding of the entire Sand Island Wastewater Treatment Plant and valuable insights into the EPA Consent Decree-related Phase 1 and Phase 2 secondary process upgrades. • **Size:** N/A • **Cost:** $1M • **Role:** Stantec Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: SIWWTP Plant Bioconversion Facility Capacity Upgrades (Honolulu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Bob serves as contract manager for planning and engineering design services in support of RMTC's subcontract to Synagro-WWT (Synagro) for Phase 1 biosolids system upgrades to SIWWTP on behalf of CCH. Upgrades to the 90 MGD SIWWTP include design for additional Bioconversion gas digesters, and ancillary systems and facilities, and generation of steam and power based on Combined Heat and Power (CHP) technology. The project schedule for planning and design is being expedited in order to coordinate construction activities with those associated with AECOM's Phase 1 – Secondary Treatment Upgrades Project. The Basis of Design (BOD) Report phase of the project is currently underway. • **Size:** N/A • **Cost:** $1M • **Role:** Contract Manager

d.

(1) TITLE AND LOCATION *(City and State)*: PAR 1304 - 2018 District-Wide Facility Plan (Denver, CO)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The 2018 Facility Plan establishes short-term and long-term project recommendations, process selection, and implementation schedules to meet the District's planning and regulatory drivers for the next 20 years. To address planning, regulatory and TBL drivers over the next 20 years, Stantec partnered with the District to identify short and long-term capital improvements with a focus on innovation, adaptation, and resilience. The projects included a complete assessment of the existing processes and overall planning drivers, development of alternative analysis, and integrated solutions, which were compiled and prioritized on a capital expenditure schedule. The District serves approximately 1.8 million people in the Denver metropolitan area by providing wastewater transmission and treatment services to 22 member agencies and 26 special connectors over a 715- square mile area. • **Size:** 715 square mile area • **Cost:** $3M • **Role:** Principal-in-Charge

e.

(1) TITLE AND LOCATION *(City and State)*: PAR 1280 Nuisance Struvite and Dewaterability Improvements (Denver, CO)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This $22M project included Centrisys MagPrex phosphorus recovery and struvite harvesting process, the largest in the world, including pilot studies, phosphorus mass balance modeling, full plant performance modeling (analysis of biological phosphorus removal coupled with P-recovery process on dewatering performance of digested sludges), technology selection for the ultimate system, including coordination with Metro's biosolids management program. • **Size:** 300 MGD • **Cost:** $22M • **Role:** Principal-in-Charge

County of Hawai'i

Robert G. Armstrong, PE
Professional Engineer - Hawaii PE #8682
Expires 04/30/2026

License ID	Entity Type	Restriction	Class Prefix
PE-8682	INDIVIDUAL	--	--
License Type	**Active/Inactive**	**Trade/Professional Name**	**Business Code**
PROFESSIONAL ENGINEER	ACTIVE	--	--
Legal License Name	**Original License Date**	**Special Privilege**	**Educational Code**
ROBERT G ARMSTRONG	09/19/1995	--	--
Status	**Expiration Date**	**Conditions & Limitations**	
CURRENT, VALID & IN GOOD STANDING	04/30/2026	--	
Business Address			
--			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Enli Li	Project Manager, Water	13	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Honolulu, Hawaii)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer #PE-18288, State of Hawaii

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Enli is a professional engineer with 12 years of experience working for the Honolulu Authority for Rapid Transportation in over $10 billion Honolulu Rail Transit Project in Honolulu, Hawaii. She is experienced in the various aspects of project delivery, including the development of technical and contractual procurement documents for various projects to managing and administrating contracts. Enli's responsibilities have included ensuring contract compliance, interfacing with various stakeholders, preparing change order documents, and reviewing technical deliverables.

132070 Drilled Shaft Inspector Course, FHWA NHI, Honolulu, Hawaii

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (*If applicab*
a.	Honolulu Authority for Rapid Transportation (Honolulu, HI)	2023	2023

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with curren

The project is a mostly elevated and automated fixed-guideway light rail system along O'ahu's south shore connecting East Kapolei in West Oahu to Honolulu's dense urban core in Civil Center. The alignment includes 18.9 miles with 19 stations and features platform screen gates and driverless trains. Enli was responsible for providing de and technical support for the design and construction team including change management, preparing technical procurement documents, reviewing technical drawings and reports, coordinating with all stakeholders (state, utility companies, consultants, subconsultants). She was also responsible for administering the 138kV relocation project al Kamehameha Highway to ensure that the scope, schedule, and budget of the contract were met. **Role:** Project Manager, Civil Engineer

County of Hawai'i

Enli Li, PE
Professional Engineer - Hawaii PE #18288
Expires 04/30/2026

License ID	Entity Type	Restriction	Class Prefix
PE-18288	INDIVIDUAL	--	--
License Type	**Active/Inactive**	**Trade/Professional Name**	**Business Code**
PROFESSIONAL ENGINEER	ACTIVE	--	--
Legal License Name	**Original License Date**	**Special Privilege**	**Educational Code**
ENLI LI	12/14/2018	--	--
Status	**Expiration Date**	**Conditions & Limitations**	
CURRENT, VALID & IN GOOD STANDING	04/30/2026	--	

Business Address
--

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jim Rasmus, PE, ENV SP, BCEE	Water/Stormwater Lead	37	3

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (San Diego, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS and BS, Civil Engineering	Professional Engineer #20143, HI Professional Engineer #46127, CA ENV SP, Institute for Sustainable Infrastructure

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Board Certified Environmental Engineer, American Academy of Environmental Engineers & Scientists, American Society of Civil Engineers, California Water Environment Association, Water Environment Federation, WateReuse Association, Chi Epsilon National Civil Engineering Honor Society

18. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Treasure Island Water Resource Recovery Facility (TIF) (San Francisco, CA)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Jim oversees stormwater services for the New TIF. His team is responsible for meeting SFPUC criteria for on-site stormwater management using a bio-retention basin that captures stormwater from the TIF site and, after treatment, conveys this stormwater to a two-cell constructed wetlands where it will be blended with recycled water for polishing prior to reuse. • **Size:** 1.5 MGD • **Cost:** $300K (stormwater services) • **Role:** Stormwater Technical Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Planning for Stormwater to Supplement San Diego's Pure Water Program (San Diego, CA)	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: The City of San Diego's Pure Water Program evaluated the feasibility of capturing and treating stormwater and other runoff from urban areas to enhance long-term water supplies as part of Phase 2 of their program. Ultimately, 15 sites were focused on developing conceptual designs. It was found that many of the concepts may offer multiple benefits beyond primary objective (water supply though municipal reuse) including: stormwater compliance, environmental enhancement, groundwater recharge, recreational features; and direct harvesting and use at the sites. • **Size:** San Diego • **Cost:** $200K • **Role:** Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: Stormwater Capture Parks Program Support Services (Los Angeles, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Jim's team has provided Safe Clean Water Program funding support services for five parks projects: David M. Gonzales Recreation Center; North Hollywood Park and Valley Plaza Park in Round 2; along with Whitsett Fields Park North and Alexandria Park in Round 3. The team reviewed existing design documents and provided advice on improvements to the scoring rubric to maximize funding opportunities. In addition, the team developed improved graphics and presentations, as well as providing technical support during Steering Committee and Scoring Committee meeting. • **Size:** Varied • **Cost:** Varied • **Role:** Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*: Hollenbeck Lake Rehabilitation Feasibility Study (Los Angeles, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2022 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Hollenbeck Park is centered on a 4.3-acre urban water body that serves as an engaging water feature for the public. Through a process infused with community involvement, Jim collaborated with the client to develop a multi-benefit design approach that integrates stormwater capture, water quality, community enhancement and other improvements at the park while recognizing Boyle Heights' rich history and culture while injecting modern technology and water management. Based on the 2016 Concept Report, several off-site improvements involving regional stormwater management and non-potable recycled water piping were suggested. Based on this report, the team came up with a list of observations that would need to be addressed in the phased manner the City of Los Angeles decided upon. • Size: 4.3 acres • **Cost:** $30M (construction) • **Role:** Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*: La Cienega Park and Frank Fenton Field Stormwater Quality Project (Beverly Hills, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: As part of the Ballona Creek Enhanced Watershed Management Plan, the Cities of Beverly Hills, Los Angeles and West Hollywood had worked with Jim to develop a concept for a $30M regional stormwater quality project sited beneath La Cienega Park and Frank Fenton Field within Beverly Hills. As a follow-up to that effort, these same agencies selected Jim's team to further evaluate the feasibility of site for infiltration, water harvesting, recycling via discharge to the sanitary sewer, and flow-through treatment for discharge back to the MS4. In conjunction with this, the team developed a green infrastructure capital improvement plan that will fulfill the remainder of the City of Beverly Hills comprehensive plan for complying with the EWMP. • **Size:** N/A • **Cost:** $30M • **Role:** Project Manager

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Michael Reed, PMP, LEED AP	Project Manager	42	20

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Walnut Creek, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Industrial Engineering	Project Management Professional LEED AP

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Michael is an accomplished project manager with 40 years of experience. He is internationally experienced and has managed both municipal and military projects. Michael serves as a contract and project manager for the SFPUC PRO.0076.C as-needed engineering services contract; SFPW as-needed Electrical and Mechanical Engineering services contracts; and the Port of San Francisco as-needed engineering services contract; a project manager for a subcontract under R.M. Towill Corp. (RMTC) and a contract directly in service to CCH via the RMTC-Stantec JV for support of upgrades to SIWWTP; and a project manager for various projects with the USACE Sacramento District for traditional Environmental remediation, A-E design services (vertical and horizontal design), civil works programs, and construction management services.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Secondary Treatment Phase 2 Expansion (Honolulu, HI)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In a joint venture with RMTC, Michael serves as the financial project manager for Phase 2 of the expansion which will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. **Size:** 90 MGD **Cost:** $1.5B **Role**: Financial Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Phase 1 Secondary Treatment Upgrades Third Party Review and VE Workshop (Honolulu, HI)	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Michael served as project manager for a negotiated contract under RMTC's prime contract with AECOM to provide independent, third-party review of design development for planned secondary treatment upgrades to the existing 90 MGD wastewater treatment plant at Sand Island, Honolulu, Hawaii. Design review scope included review at the 60%, 90% and 100% phases, as well as facilitating an independent VE Study after review of the 60% design. **Size:** N/A **Cost:** $1M **Role:** Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*

SWWTP Bioconversion Facility Capacity Upgrades (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Michael serves as financial and project manager for planning and engineering design services in support of RMTC's subcontract to Synagro-WWT (Synagro) for Phase 1 biosolids system upgrades to SIWWTP on behalf of CCH. Upgrades to the 90 MGD SIWWTP include design for additional Bioconversion gas digesters, and ancillary systems and facilities. The project schedule for planning and design is being expedited in order to coordinate construction activities with those associated with the Phase 1 – Secondary Treatment Upgrades Project. The final design phase of the project is currently underway. **Size:** N/A **Cost:** $1M **Role:** Financial Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*

PRO.0019.C Contract, Task Order 34, Harry Tracy Wastewater Treatment Plant Underdrains Assessment (San Francisco, CA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Michael managed this negotiated task order under the SFPUC PRO.0019.C as-needed engineering services contract for a project that called for conducting an assessment of failed filter underdrains, and preparation of a conceptual design for repair of the underdrains, at the Harry Tracy Plant. **Size:** N/A **Cost:** $235K **Role:** Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*

National Nuclear Security Administration Albuquerque Complex Design (Albuquerque, NM)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☐ Check if project performed with current firm

Scope: Michael provided project management for a negotiated task order for the design of a new three-story 333K square-foot administrative office building under the United States Army Corps of Engineers SPD A-E services IDIQ contract (W91238-11-D-0010 DM01) to house approximately 1,200 employees and 19 different user groups for the Department of Energy (DOE)/National Nuclear Security Administration (NNSA). The facility included office spaces, conference rooms, specialized secure spaces, a fitness center, breakrooms, a mail room, MEP/data/telecom rooms, warehouse areas, and a loading dock, and other amenities. The project pursued LEED Gold certification and incorporated a "cool" roof, low e-glazing, exterior sunshades, water-efficient plumbing fixtures, FSC wood and recycled content materials, and electric vehicle charging stations. A roof-mounted 200 kW photo-voltaic array produced 356,336 kWh annually, which is an energy cost value of approximately $21K. The design also conforms to the Guiding Principles for Sustainable Federal Buildings. The A-E fee included budget for site investigations (topographic surveying, utility locating surveying, and a geotechnical investigation, including ground-penetrating radar survey), facilitation of a Design Charrette, participation in a VE workshop, and design development through 30/60/90% Final; 100% Corrected Final design; and a Successful Bidder Set package. **Size:** 333,324 square-feet **Cost:** $140M **Role**: Project Manager

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Billy Wong, PE, LEED AP	Deputy Director	24	24

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Walnut Creek, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Environmental Engineering	Professional Engineer (CA - Civil), LEED AP

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Billy is a civil engineer with 22 years of experience and leadership in construction management, I&C inspection, and environmental engineering. He has experience in environmental remediation, civil, mechanical, and electrical and instrumentation design for wastewater and water treatment systems. Billy has an understanding of complex environmental issues and a broad range of construction management practices. His experience has covered projects in design, construction, operation and maintenance for water, and wastewater and groundwater treatment systems. His responsibilities have included project management and engineering for preparation of construction drawings and specifications and construction management.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Design Engineering Services Oceanside Plant (San Francisco, CA)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Billy is the technical lead for two task orders providing engineering design services for Westside Pump Station Reliability and the Digester Gas Utilization Projects totaling in construction costs of $86M awarded under the contract. Billy is responsible for the scope of work and budget development for projects under this engineering services contract. For the Westside Pump Station Reliability Improvements and Digester Gas Utilization Projects, Billy leads the team in providing engineering services including hydraulic analysis, CFD Modeling, process evaluation, constructability evaluation development of opinions of probable construction costs, and multi-disciplinary design deliverables. The project is currently in construction where Stantec continues to provide engineering services. **Size:** 180 MGD Wet Weather Pump Station, 42 MGD Wastewater Treatment Facility **Cost:** $86M **Role:** Project Technical Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
As-Needed Mechanical and Electrical Engineering Services (San Francisco, CA)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Billy is currently managing more than 24 Contract Service Orders (CSO) to date for the current As-Needed Mechanical and Electrical Engineering Services for San Francisco Public Works (SFPW). He has performed tasks for various San Francisco Public Utilities Commission and SFPW project managers and project engineers over a wide range of projects including surge analysis for various sewer pump stations, Alternative Analysis and Conceptual Engineering for SEP Primary and Secondary Clarifiers Upgrades, Computational Fluid Dynamics (CFD) Modeling for SEP Bldg. 521 W3 Pump Station Upgrade, CFD Modeling for North Shore Redundant Wet Weather Pump Station (NSS), and Oceanside Treatment Plant (OSP) Gas Dispersion Modeling for Digester Gas Flare. This is an ongoing contract that is continually renewed. **Size:** Varies **Cost:** Varies **Role:** Contract Manager

c.

(1) TITLE AND LOCATION *(City and State)*

SIWWTP Phase 1 Secondary Treatment Upgrades Third Party Review and VE Workshop (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: As a subconsultant to RMTC, the Stantec team provided the detailed review of the design (by others) of Sand Island's Phase 1 Secondary Treatment Facilities Upgrades Project. The team also conducted a five-day VE workshop at the 60-percent design level. The Third Party review involved close coordination across all disciplines within the R.M. Towill/Stantec team as well as interface with the lead design consultant and key CCH Water Engineering and Construction (WEC) and Operations staff. Over 5,000 design items were addressed, many in a repetitive or iterative process, over the 30/60/90/100% review cycles, which generated over 3,000 review comments. VE produced 88 ideas for value enhancement, with an approximate value of $83M. The ideas carried forward by the designer resulted in an overall impact to the bottom line on the order of approximately $23M. The March 2020 through March 2021 SIWWTP Phase 1 Secondary Treatment Upgrades 3rd Party Review and VE Workshop effort provided a cohesive R.M. Towill/Stantec team to uniquely gain in-depth and detailed knowledge and understanding of the entire SIWWTP and valuable insights into the EPA Consent Decree-related Phase 1 and Phase 2 secondary process upgrades. **Size:** N/A **Cost:** $1.6M **Role:** Team Project Engineer

d.

(1) TITLE AND LOCATION *(City and State)*

Plant Expansion and General Engineering Services (Gilroy, CA**)**

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Billy serves as the Design Manager for the $50M 2.5-MGD membrane bioreactors (MBR) facility built to expand the treatment capacity of the existing conventional activated sludge plant (oxidation ditch) to 11-MGD. The facility employed headworks (pump stations and fine screens), activated sludge/BNR bioreactors, MBR, and ultraviolet disinfection, internal recycle and return sludge pumping. The facility incorporated the expansion of medium voltage substation, MCCs, 1500-KW standby power system along with a state-of-the-art SCADA system and will be capable of remote operation. As part of the General Engineering Contract, Billy manages general engineering studies and designs projects for the WWTP including Ultraviolet disinfection facility and standby generators facilities (total capacity of 3,500 KW). Other engineering services include the Regional Water Quality Control Board Wastewater Discharge Requirements (WDR) and National Pollutant Discharge Elimination System (NPDES) Permit renewal and negotiations, expansion design of California Title 22 compliant recycled water pump stations and reservoir; construction management for the current $25M CIP, which includes construction of redundant influent force main, secondary clarifier, modification to oxidation ditches, and expansion of pre-anoxic chambers. Since 2011, Billy is responsible for delivering $35M+ CIP projects on behalf of the South County Regional Wastewater Authority. The plant expansion is currently out for bid. **Size:** 2.5 MGD **Cost:** $50M **Role**: Design Manager

e.

(1) TITLE AND LOCATION *(City and State)*

San Mateo Basins 2 and 3 Collection System Improvements (San Mateo, CA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Billy serves as technical review and construction liaison support for City of San Mateo. The City of San Mateo established the Clean Water Program to upgrade aging infrastructure, enhance reliability, and provide capacity for wet weather flows in the collection system. The city has divided the improvements into five design basins and ranked the project construction priority. The most critical upgrades are located in Basins 2 and 3. As part of the alternatives analysis, the team compared tunnel options with storage options. The tunnel option was favored to limit disruption, but the storage option favored faster implementation. The City decided on 11 relief sewers (25,000 feet), 3 pump station (59, 2.5, and 1.7 MGD) replacement or upgrade projects, and a 5.3 MG Underground Storage/Flow Equalization facility near Delaware Street in Central San Mateo. The design stage is complete and several of the nine construction packages are underway. **Size:** N/A **Cost**: $14M (design), $165M (capital) **Role:** Technical Reviewer and Construction Liaison Support

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Ed Othmer, PE, CPESC, CPSWQ, QSP/D ToR, QISP ToR, ENV SP, PMP	Stormwater/Wet Weather Flow	33	8

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (San Diego, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Civil Engineering BS, Civil Engineering	Professional Engineer (Civil) #57536, CA Certified Professional in Erosion and Sediment Control (CPESC) #2776, EnviroCert International, Inc. Certified Professional in Stormwater Quality (CPSWQ) #103, EnviroCert International, Inc. QSD/QSP #00060, CA QISP #00089, CA Envision™ Sustainability Professional (ENV SP) #22220 Project Management Professional (PMP), Project Management Institute

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Water Committee Co-Chair, Industrial Environmental Association; Water Reliability Coalition and the American Society of Civil Engineers

1. 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City of San Diego, Storm Water Engineering and Consulting Services (San Diego, CA)	2013	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Ed oversaw the City of San Diego Storm Water Engineer and Consulting Services contract. 1) Task Management and Administration, 2) Best Management Practices Development and Engineering, 3) Storm Water Infrastructure Asset Management Services, 4) Environmental Assessment and Permitting Services, 5) Storm Water Monitoring and Investigations, 6) Strategic Planning, and 7) Program Assessment Services. The following are of some projects performed: Treatment Control BMP Program, Tijuana River Valley BMP Concept Design, RCP Assessment, Outfall Condition Assessments, Evaluation of Proprietary BMPs, Drainage Study of Existing Systems, Municipal Park Irrigation/Water Use Study, Main Street Infiltration Design, Pump Station Assessment, 43rd and Logan Bioretention Basin Study, Rainwater Harvesting Technical Specifications, and Removal of Land Use Regulation and Policy Barriers to LID FY 13. • **Size:** Various locations in San Diego • **Cost:** Varied • **Role:** Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Gerdau Rancho Cucamonga Mill – Stormwater Collection and Diversion System Design (Rancho Cucamonga, CA)	2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Ed led a team that prepared final engineering design of a stormwater collection and diversion system at the Gerdau Rancho Cucamonga Mill in Rancho Cucamonga. The purpose of the project was to develop stormwater infrastructure improvements to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Industrial Activities, Order NPDES No. CAS000001. Stormwater run-on structures are to be sized to convey the 10-year, 24-hour flow rate. These structures are intended to collect, route, and discharge stormwater run-on around the industrial areas of the site. Work included topographic survey, hydrology and hydraulics analysis, utility survey, and storm drain conveyance design. • **Size:** N/A • **Cost:** Unknown • **Role:** Project Manager/Lead Author

c.

(1) TITLE AND LOCATION *(City and State)*: Long Beach Municipal Urban Stormwater Treatment (LB-MUST) (Long Beach, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: The project intercepts, diverts, and treats dry weather urban runoff (fresh and brackish water) and first flush of stormwater runoff from 15 pump stations. The LB-MUST facility includes the following state-of-the-art equipment: 1) Purifics' Ceramic Ultrafiltration (CUF), which is a robust silicon carbide ceramic membrane process; and 2) photo-cat, which is a photo-catalytic oxidation and reduction process. Additionally, a brackish wetland (LID feature) will be constructed for water quality polishing and as a community park. Treated fresh water will help create and sustain the proposed wetlands riparian habitat, as well as provide an alternative water source for other nearby parks and the Civic Center. • **Size:** 3 acres • **Cost:** $12M • **Role:** Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*: City of San Diego Watershed Asset Management Plan Flood Control Assessment (San Diego, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2013; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Ed participated in the creation of a process to analyze the potential storm drain flooding risk in the City and execute the first phase of the mapping process. The first phase of the study focused on the Chollas Creek Watershed to identify locations of potential flood control challenges using the Autodesk Storm and Sanitary Analysis program and available GIS data. The second phase was a continuation of the analysis in the Los Penasquitos Watershed. The task included creating an implementation strategy, preliminary flood control analysis, and mapping of the risk prioritization. • **Size:** N/A • **Cost:** Unknown • **Role:** Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*: Coordinated Implementation Monitoring Program (CIMP) Implementation (East San Gabriel Valley Watershed Management Group, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2021; CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Ed managed the implementation of the East San Gabriel Valley Watershed Management Group (Group) CIMP, which evaluates impacts from MS4 discharges and provides decision support for actions to improve water quality and enable the Group to comply with the MS4 Permit. The first three years of CIMP implementation were critical to ensuring the efficiencies gained in the adaptation of MS4 Permit monitoring requirements are maintained into the future; the first year of CIMP implementation was the 2015/16 monitoring season. The RWQCB and non-governmental organizations monitored CIMP implementation closely to ensure the innovative and adaptive approaches continue to meet the requirements of the MS4 Permit. The CIMP Implementation for the ESGV Group monitoring was composed of five sub-elements: Equipment Procurement and Installation, Receiving Water Monitoring, Stormwater Outfall Monitoring, Non-Stormwater Outfall Evaluation, and Data Management and Reporting. • **Size:** N/A • **Cost:** Varied • **Role:** Project Manager

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Malueg, PE	Resilient Infrastructure Lead	40	25

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Winston-Salem, NC)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Water Biology BS, Civil and Environmental Engineering	Professional Engineer (Civil) #15642, KY

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Water Environment Federation, American Public Works Association, American Society of Civil Engineers

3. 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Blue and Green Corridors Project (New Orleans, LA)	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Funding support, planning and design of blue-green corridors to mitigate multi-hazard (flood and subsidence). Role included assisting in the HUD National Disaster Resilience Competition to secure nearly $140M in grant funding. Role included original visioning and selection of mitigation best management practices as well as facilitating the selection of adaptation monitoring criteria. • **Size:** N/A • **Cost:** $4.1M (design), $38M (construction) • **Role:** Resilience QA/QC

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Great Lakes St. Lawrence Cities Initiative Coastal Resilience Initiative (Lenox, IL)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Role includes identifying coastal vulnerabilities and risks including risks associated with climate change, identifying and screen mitigation options, developing conceptual designs and capturing findings within Project Implementation Frameworks in support of soliciting and securing federal funding. Effort is being funded by a series of special interest and federal (NFWF) grants, with a value to date exceeding $2.5M. Analysis to date has been limited to the states of Wisconsin, Illinois, and Michigan. Future scope to include coastal analysis in Ohio, Pennsylvania, New York and Minnesota. • **Size:** N/A • **Cost:** $2.5M • **Role:** Initiative Advisor - Resilience

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
100 Resilient Cities Ala Wai Canal Flood Mitigation Analysis (Honolulu, HI)	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: John provided coastal assessments, as well as watershed flood risk including schematic design of flood mitigation best management practices integrated into municipal golf course. Findings and analysis were in support of the city negotiating project partnership with USACE. • **Size:** N/A • **Cost:** $100M+ (construction) • **Role:** Technical SME

d.	(1) TITLE AND LOCATION *(City and State)* Tottenville Shoreline Protection Project (Staten Island, NY)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If* applicable*)* Bid ~ 2023
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE **Scope:** Planning and design of multi-layers of resilience shoreline community protection project. The project integrated offshore living breakwaters, a network of natural and reinforced dunes, restoration of coastal wetland and wooded areas within a public beach/park environment. Role included assisting in securing nearly $20M in FEMA BRIC grant funding. • **Size:** 526 acres • **Cost:** $32M (construction) • **Role:** Economic Analyst	☒ Check if project performed with current firm	
e.	(1) TITLE AND LOCATION *(City and State)* Detroit Area Down River Community Conference Coastal Resilience Study (Detroit, MI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If* applicable*)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE **Scope:** Role included facilitating community stakeholders, identifying vulnerabilities and risks as well as correct actions to advance to schematic design. Stakeholders included State, county, and multi-cities as well as utility and environmental community representatives. Study leverages findings of recent studies by the USACE. • **Size:** Detroit • **Cost:** N/A • **Role:** Stakeholder Outreach	☒ Check if project performed with current firm	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Christina Hurley, AICP	Senior Hazard Mitigation Planner	12	7

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Raleigh, NC)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Master of City and Regional Planning BA, Environmental Studies, Environment and Infrastructure	Certified Planner #030812, American Institute of Certified Planners (AICP)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certifications: Utility Risk and Resilience Certification Program, American Water Works Association; NCI Charrette System Certificate Training, National Charrette Institute
Memberships: American Planning Association
Awards: 2014 Carolina Global Initiative Award, New Zealand, Modeling and Mapping Climate Change Risk and Adaptation Measures

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu Climate Change Design Guidelines (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina is supporting the development of the City and County of Honolulu (CCH)'s first iteration of climate change design guidelines. The guidelines, which will apply to CCH capital projects, include a report on climate hazard impacts and best available climate data, a climate risk exposure screening tool, and guidelines to provide design adjustments for enhancing resilience (including a design checklist). Christina's role on the project is to bring an understanding of climate hazard impacts to specific types of community infrastructure to inform deliverables. **Size:** County-wide • **Cost:** $418K • **Role:** Climate Adaptation Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui County Hazard Mitigation Plan Update (Maui, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina led the FEMA-approved hazard mitigation plan's risk and vulnerability assessment component. Christina profiled each identified hazard, to include a description of the hazard, previous occurrences and impacts, hazard probability, and hazard severity. Christina used ArcGIS to assess vulnerability of structures, critical facilities, transportation infrastructure, and cultural resources to certain hazards, and included an assessment of hazard-specific impacts on socially vulnerable populations. Among other hazards, this risk assessment assessed coastal erosion, storm surge, and coastal flooding as profiled hazards, and emphasized the relationship between coastal erosion and sea level rise citing peer-reviewed research and available climate data. Further, Christina developed the risk and vulnerability assessment to maintain the county's current Community Rating System (CRS) status. • **Size:** County-wide • **Cost:** $54K • **Role:** Risk and Resilience Assessment Lead

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui Department of Water Supply America's Water Infrastructure Act Compliance, Risk and Resilience Assessment (RRA) (Maui, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina served as a primary risk assessment specialist to complete the utility's RRA, which was developed in accordance with the America's Water Infrastructure Act requirements and the American Water Works Association J-100 Standard. Christina helped identify DWS critical assets and potential threats, and used available tools, such as the Program to Assist Risk and Resilience Examination (PARRE) and ArcGIS, to calculate estimated risk to water supply assets from natural hazards and human-cause threats. Christina used these tools to develop a utility risk index for the water system, as well as to assess existing and potential risk-reduction countermeasures. Further, Christina used the results of the RRA to recommend resilience strategies to the utility. The RRA assessed current and future threats with consideration to future climate. • **Size:** County-wide • **Cost:** $177K • **Role:** Risk and Resilience Assessment Specialist

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Territory of American Samoa Hazard Mitigation Plan Update (Island-wide, American Samoa)	2022	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina led the development of the hazard mitigation plan's risk and vulnerability assessment, which analyzed hazard impacts on structures, community lifelines (e.g., roads, utility networks, critical facilities), vulnerable populations, and cultural resources. This all-hazards plan emphasized climate adaptation and nature-based solutions, such as living shorelines and the importance of coral reefs in providing shoreline protection. • **Size:** Territory-wide • **Cost:** $54K • **Role:** Risk Assessment Lead

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Benjamin (Ben) Berridge, AICP, PMP	Environmental Planner	15	10

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE
BA, Environmental Studies	Certified Planner #384544, American Planning Association, American Institute of Certified Planners Project Management Professional – Project Management Institute

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: American Planning Association, Hawai'i Chapter, Association of Environmental and Health Sciences Foundation

Additional Training/Certifications: Project Management Professional (PMP) Boot Camp, Batelle Memorial Institute/Coastal Marine Spatial Planning Advanced Training Certificate

19. RELEVANT PROJECT S

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben managed all Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. He also managed collection of storm water samples at 75 industrial facilities throughout the island of Oahu. Duties included investigating, planning and installation of remote water quality and atmospheric monitoring stations to collect first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Ben provided QA/QC oversight of telemetered monitoring stations incorporating data logged by automated sampling equipment, water quality sensors, as well as area-velocity sensors and pressure transducers providing continual flow records and site conditions. He also tracked/archived weather, coordinated 24/7 on-call teams for grab/composite sample collection, maintained rainfall-runoff curves and monitored automated sampling equipment. • **Size:** N/A • **Cost:** $462K (2022) • **Role:** Project Manager/Environmental Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture (Pāhoa, Hawai'i Island, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provides environmental monitoring services to Puna Geothermal Venture, in Pāhoa, Hawai'i. Services include meteorology, noise, air quality, and groundwater monitoring as required by Geothermal Resource, Underground Injection Control, and Noncovered Source Permits from the State of Hawai'i Department of Health (DOH). He manages data collection (EDAS), conducts QA/QC process for daily air quality reports, and authors semi-annual hydrological monitoring reports and monthly noise, meteorological, and air quality monitoring reports. Field activities include semi-annual groundwater sampling and calibration of meteorological monitoring equipment. • **Size:** N/A • **Cost:** $2.4M • **Role:** Program Manager/Environmental Planner

c.

(1) TITLE AND LOCATION *(City and State)*
Engineering and Environmental Planning Studies for Alternative Energy at PMRF (Kekaha, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2021
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided oversight and management of engineering and environmental planning studies to support current and future resiliency and energy requirements for Pacific Missile Firing Range (PMRF) in Kekaha, Kauai, Hawai'i. As part of a PMRF energy resiliency roadmap, the project team completed assessments to determine the viability and sustainability of alternative energy solutions, to include a cost benefit analysis of waste to energy (WTE) and other alternative energy technologies. In addition, the team consulted with cooperating government agencies, State, County, local utilities including Kauai Island Utility Cooperative (KIUC) and local industry for the island of Kauai. The project team analyzed the impacts on cultural and natural resources and recommended mitigation measures to minimize potential impacts. Environmental planning data collected was used for future National Environmental Protection Act (NEPA) documents for PMRF. • **Size:** N/A • **Cost:** $510K • **Role:** Program Manager/Environmental Planner

d.

(1) TITLE AND LOCATION *(City and State)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Honolulu, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2023
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided management and oversight of the development of a large, multifaceted, and high-profile Environmental Impact Statement (EIS) evaluating improvements, repairs, and/or new construction in support of Joint Base Pearl Harbor Hickam (JBPHH) submarine dry dock and dry dock production facility infrastructure, which is part of the US Navy's Shipyard Infrastructure Optimization Program (SIOP). Coordinated evaluation of four alternatives and a no action alternative in detail, ESA Section 7 consultation including Biological Assessment, Essential Fish Habitat Assessment, NHPA section 106 consultation, and USACE CWA Section 404 permitting and compensatory mitigation planning, as well as State of Hawai'i Department of Health (HDOH) CWA Section 401 water quality certification support. • **Size:** N/A • **Cost:** $5.5M • **Role:** Project Director/Environmental Planner

e.

(1) TITLE AND LOCATION *(City and State)*
Biological and Benthic Habitat Survey in Support of SIOP and INRMP for JBPHH (Honolulu, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2023
CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided oversight and management of various biological and benthic studies to document benthic habitats, coral density and cover, biofouling communities, fish species, and protected species in support of Navy Shipyard Infrastructure Optimization Program (SIOP) as well as a revision of the Joint Base Pearl Harbor Hickam (JBPHH) Integrated Natural Resources Management Plan (INRMP). Project team supported Navy consultations with various agencies and provided data supporting recommendations for which corals found within the multiple construction footprints can potentially be successfully relocated. Project team developed a GIS web application that showcases all study findings during the entire project duration in an easily navigable interactive platform. • **Size:** N/A • **Cost:** $1.3M • **Role:** Project Director/Environmental Planner

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Bernadette Callahan, PE	Green Infrastructure Lead	20	15

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Philadelphia, PA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Civil Engineering	Professional Engineer #PE043214, LA Professional Engineer #PE077478, PA Professional Engineer #103566-01, NY Professional Engineer #0402062871, VA

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: American Water Resources Association

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Blue and Green Corridors Project (New Orleans, LA)	2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In 2015, New Orleans participated in the US Department of Housing and Urban Development's National Disaster Resilience Competition with a proposal to create the City's first resilience district within the Gentilly neighborhood. The district represents a combination of projects and efforts that focus on innovative solutions to water management with the "living with water" theme and triple bottom line approach at the forefront. Blue and Green Corridors is the largest of the Gentilly Resilience District projects that aims to reduce flood risk, slow land subsidence, and encourage neighborhood revitalization. The project will create a network of linear wetlands and canals, green infrastructure, recreational parks, complete streets, and community spaces within three linear miles of the public right-of-way and six vacant parcels. Along the streets slated as "blue corridors", the city will construct linear wetlands and canals within the wide neutral grounds between vehicle travel lanes to receive and manage runoff, and immediately relieve stress on the pumping system, allowing it to "catch up." Along the streets slated as "green corridors", the city will construct a variety of green infrastructure bioswales and bumpouts to allow stormwater runoff to be stored and seep slowly back into the ground. Wherever possible, the project proposes road diets to reduce impervious cover, beautify the neighborhood with plantings, calm traffic, and to build complete streets for safe walking and biking. Funded by HUD, the project employs a triple bottom line cost benefit analysis to prioritize treatments that maximize benefits for the community. This project is currently in 90% design and is expected to be constructed in 2024-2025. • **Size:** 3 linear miles of streetscape improvements and 6 public parks • **Cost:** $40M • **Role:** Project Technical Lead

b.

(1) TITLE AND LOCATION *(City and State)*

Green City, Clean Waters Initiative Engineering On-Call (Philadelphia, PA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2020	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Green City, Clean Waters is the City of Philadelphia's long-term plan for the control of combined sewer overflows using green infrastructure on a distributed scale. Stantec has served as an on-call engineering design consultant to the Philadelphia Water Department. Under this contract, we were responsible for providing surveying, geotechnical engineering, landscape architecture, green stormwater infrastructure, and site/civil engineering design services in support of their program. Between 2011-2020, Bernadette managed a variety of green infrastructure projects under this program, including the design of hundreds of stormwater tree trenches, bumpouts, subsurface infiltration basins, planters, and rain gardens. These projects are located within the public right-of-way, on parks and recreation parcels, on schoolyards, and on vacant properties owned by the City of Philadelphia. • **Size:** Varied • **Cost:** $1-3M • **Role:** Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*

GKOH15-02 Preliminary and Final Design Services for Green Infrastructure in the Gravesend Bay CSO Tributary Area, Phase 2 (Brooklyn, NY)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: This project supports the City's long-term plan to control combined sewer overflows using green infrastructure on a distributed scale. The team assisted the New York City Department of Design and Construction with the planning and design of 40,000 LF of precast porous concrete paver units within the parking lane of a public right-of-way. The treatment will be applied on 75 residential streets within the Gravesend neighborhood in Brooklyn. Sites were pre-qualified for this treatment based on an extensive geotechnical investigation and review of existing conditions. Bernadette managed the surveying, geotechnical engineering, green stormwater infrastructure, and site/civil engineering design services. The project is currently in procurement and is expected to be constructed in Summer 2023. • **Size:** 40,000 linear feet of porous pavement • **Cost:** $35M • **Role:** Project Manager

d.

(1) TITLE AND LOCATION *(City and State)*

MOVEBR: Perkins Road - Siegen to Pecue (East Baton Rouge Parish, LA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: MOVEBR is the largest and most significant transportation infrastructure investment in East Baton Rouge Parish history. The Perkins Road project consists of the widening of Perkins Road from Siegen Lane to Pecue Lane to improve traffic improvements and the construction of a shared-use path and associated streetscape improvements. Bernadette developed construction documents for approximately 40 stormwater planters within the furnishing zone of the street to provide water quality management of the public right-of-way. • **Size:** 1.5 miles • **Cost:** $26.6M • **Role:** Green Infrastructure Lead

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Heather Stephens, PE	Senior Principal, Wastewater Lead	29	7

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Portland, OR)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Civil Engineering BS, Civil Engineering	Professional Engineer (OR, WA – Civil)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Heather is a senior wastewater leader in Stantec's Portland, Oregon office. She has 27 years of experience in the planning and design of wastewater conveyance and treatment systems serving public utilities throughout the Pacific region. With a focus on municipal clients Heather has completed dozens of projects involving the design of wastewater facilities, wastewater treatment process engineering, wastewater system master planning, pipeline design, and asset management. She has a strong background in nutrient removal and resource recover in wastewater treatment systems, and brings a big picture vision to successfully handle complex projects for her clients. In addition to her technical skills, Heather is highly regarded for her ability to work with project teams, communicate challenging issues effectively, and successfully integrate efforts on large, complex projects.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Phase 2 Expansion and Organic Waste Sustainability Plan (Honolulu, HI)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Heather is co-technical lead of a joint venture team between Stantec and RM Towill to provide planning, design, and construction services for the Phase 2 Expansion of SIWWTP. The facility currently provides advanced primary treatment and is constructing Phase 1 of an expansion to upgrade the facility to meet full secondary treatment standards. The Phase 1 expansion will provide 20 MGD of secondary treatment capacity, and Phase 2 will provide secondary treatment for the remaining 70 MGD of flow anticipated through the planning horizon and related upgrades to the WWTP required to support full secondary treatment. The project also includes preparing an Organic Waste Sustainability Plan identifying potential sources of organic material for co-digestion, assessing markets for residual products (biosolids and biogas), and evaluating alternatives for organics management, co-digestion, and energy recovery at SIWWTP. **Size:** 90 MGD **Cost:** $1.5B **Role:** Co-Technical Lead for the RMTC/Stantec JV

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lander Street Improvement Program (LSIP) (Boise, ID)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Heather is co-technical lead of a joint venture team between Stantec and RM Towill to provide planning, design, and construction services for the Phase 2 Expansion of SIWWTP. The facility currently provides advanced primary treatment and is constructing Phase 1 of an expansion to upgrade the facility to meet full secondary treatment standards. The Phase 1 expansion will provide 20 MGD of secondary treatment capacity, and Phase 2 will provide secondary treatment for the remaining 70 MGD of flow anticipated through the planning horizon and related upgrades to the WWTP required to support full secondary treatment. The project also includes preparing an Organic Waste Sustainability Plan identifying potential sources of organic material for co-digestion, assessing markets for residual products (biosolids and biogas), and evaluating alternatives for organics management, co-digestion, and energy recovery at SIWWTP. Size: 90 MGD Cost: $1.5B Role: Co-Technical Lead for the RMTC/Stantec JV

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
c.	King County West Point Treatment Plant Improvements (Seattle, WA)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Heather is supporting program development for a work order contract for treatment plant improvements. The scope includes developing a program delivery plan for small- to medium-sized projects up to $15 million in construction cost, as well as designing high priority improvements using the county's design guidelines. Heather has managed several projects under the Program including an Electrical Strategic Master Plan, design of Grit Classifier improvements, and inspection and alternative analysis for rehabilitation and replacement of more than 100 critical hydraulic gates throughout the facility. **Size:** Varies **Cost:** $15M **Role:** Process Lead

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
d.	Bureau of Environmental Services (BES) Secondary Treatment Expansion Program Management Support (Portland, OR)	ongoing	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Heather is leading engineering services for the Columbia Boulevard Wastewater Treatment Plant (CBWPT) to provide assistance associated with the Secondary Treatment Expansion Program (STEP). The $400 million capital is invested in the secondary and solids handling process units, with related upgrades to the electrical system and support facilities. The scope of services included developing engineering discipline and CAD/BIM design guidelines, documenting design review practices and responsibilities for efficient staff input, providing subject matter experts to review design deliverables, and preparing uniform Division 0 and 1 specifications for use under alternative project delivery methods. **Size:** N/A **Cost:** $400M **Role:** Task Leader

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Zakir Hirani, PE, BCEE	Technical Advisor – Water/Wastewater	21	19

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Pasadena, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Environmental Engineering B.Eng., Civil Engineering	Professional Engineer #77284, CA

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Zakir is a licensed process engineer with expertise in physiochemical and biological treatment of water and wastewater. He is experienced in several aspects of water and wastewater treatment including pilot studies, conceptual process design, modeling, detailed design, engineering services during construction, start-up/commissioning and process troubleshooting. Zakir has process design experience with microfiltration and ultrafiltration (MF/UF), MBR, reverse osmosis (RO), ozone, ultra-violet disinfection (UV), advanced oxidation processes (AOP including UV/H2O2 and Ozone/H2O2). Zakir has worked on numerous advanced water treatment (AWT) projects including MWD's AWT Demonstration Facility, City of LA's Hyperion Advanced Water Purification Facility, and the City of San Diego's Pure Water Program.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hyperion 2035 Program (Los Angeles, CA)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This program will convert the 260-MGD Hyperion Water Reclamation Plant into an AWT facility. Zakir led the conceptual design of a 1.5-MGD AWT Production Facility and detailed design of a 1.0-MGD AWT Demonstration Facility; both included MBR-RO-AOP process train. The Demonstration Facility will be used to collect operational data for future conversion of HPOAS to MBR and the Production Facility is intended to produce high quality effluent for reuse nearby. Zakir is currently working on several planning studies for the full-scale facility including sidestream centrate treatment, HPOAS to FBDA and MBR conversion, AWT processes conceptual designs and others. **Size:** 260 MGD **Cost:** $3.4B **Role:** Process Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Conceptual Design of an Advanced Water Treatment (AWT) Facility (Carson, CA)	2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir led the process design for the $1.1B Advanced Water Treatment (AWT) Demonstration facility, consisting of MBR, RO and AOP (UV/H2O2) process train that will be utilized to collect sufficient operational and water quality data for design of a 150-MGD AWT facility at the Joint Water Pollution Control Plant. While using MBR as a pretreatment to RO, the facility will be the first of its kind to seek approval of the MBR-RO-AOP process train for indirect potable reuse. Zakir also led the conceptual design of a 150-MGD AWT facility consisting of an MBR-RO-AOP process train. **Size:** 150 MGD **Cost**: $1.1B **Role:** Process Lead.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Conceptual Design of Advanced Water Treatment Facilities (Los Angeles, CA)	2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir is leading the conceptual design of a 1.5-MGD AWT Production Facility and a 1.0-MGD AWT Demonstration Facility. Both facilities included MBR-RO-AOP process train. The $70M Demonstration Facility is intended to collect sufficient operational data for future modification of the high-purity oxygen Hyperion WWTP into a 70-MGD MBR facility and the Production Facility is intended to produce high quality effluent for use at the Los Angeles World Airport (LAWA), Scattergood Power Plant and on-site plant use. The project is currently under construction. **Size:** 1.5 MGD and 1.0 MGD **Cost:** $70M **Role:** Process Lead.

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Pure Water San Diego Program (San Diego, CA)	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir provided technical review, as part of Program Management services, for a 34-MGD AWT facility consisting of MF/UF, RO and UV/AOP processes to treat secondary effluent from the North City Water Reclamation Plant. The treated effluent will be used for augmentation of the Miramar reservoir. Zakir also reviewed the treatment alternatives for Phase 2 of the program that may include a 54 MGD MBR-based potable reuse train. The $3B program is scheduled to reach full implementation by 2035. **Size:** 34 MGD **Cost:** $3B **Role:** Technical Reviewer

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Wastewater Treatment Plant Expansion (Gilroy, CA)	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir is providing technical review for the 2.5-MGD MBR facility built to expand the treatment capacity of the existing conventional activated sludge plant (oxidation ditch) to 11 MGD. The $50M expansion consists of headworks (pump stations and fine screens), nitrification-denitrification bioreactor basins, membrane basins, internal recycle and return sludge pumping. The project is currently out for bid. **Size:** 11 MGD **Cost:** $50M **Role:** Technical Reviewer

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

2. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Dru Whitlock, PE	Technical Advisor - Biosolids	30	5

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Salt Lake City, UT)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MBA, Business Administration BS, Science BS, Environmental Engineering	Professional Engineer (UT – Civil)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Dru has 29 years of research, science, and engineering experience, including extensive biosolids experience, specializing in anaerobic digestion, biogas utilization, and energy management optimization. His design experience includes preliminary and detailed design of processes including conventional and advanced anaerobic digestion, cogeneration, activated sludge biological and chemical nutrient removal systems, composting and odor control systems. He is an active member of the Water Environment Federation Residuals and Biosolids Committee and Chair of the WEF RBC Bioenergy Subcommittee.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Integrated Biosolids and Zero Waste Program (Atlanta, GA)	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In 2019, with the support of the Stantec Program Management Team, the City of Atlanta began an evaluation of its biosolids (wastewater residuals) program in response to increasing economic and environmental pressures associated with Atlanta's standard way of disposing of biosolids in landfills. The regional solution involves three processes: 1) processing wastewater residuals with industrial/commercial high-strength organic waste, food waste, and fats, oils, and greases (FOG) via a thermal hydrolysis and anaerobic digestion technology; 2) processing biosolids and green waste via composting, and 3) thermally drying biosolids with existing systems. To leverage the use of existing assets, the systems were grouped into separate regional processing facilities to provide overall redundancy and reliability. The Regional Organics to Energy Center's primary function is to process the high organic-strength waste streams and produce renewable energy that can be used to operate the facility or sold to local energy markets. With high organic carbon and nutrient content, the residuals remaining from this process would then be reused for agricultural operations. **Size:** 220 MGD **Cost:** $300M **Role:** Senior Technologist

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Biosolids Study, Salt Lake City Water Reclamation Plant (Salt Lake City, UT)	2012	2012

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Dru led the development of a robust, cost-effective, wastewater biosolids management plan for the 56 MGD Salt Lake City Water Reclamation plant including the development of improvements to solids conveyance and screening, determining the type of anaerobic digester cover replacement, digester mixing system assessment, analysis of the impacts on biosolids production of internal plant recycle streams, and assessment of potential future regulatory requirements governing phosphorus removal. **Size:** 56 MGD **Cost:** $20M **Role:** Senior Technologist and Assistant Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Biosolids Facility Plan, Palo Alto Regional Water Quality Control (Palo Alto, CA)	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Dru led the methodology development, the evaluation, and the report development for this project. During this project, several wastewater residuals stabilization and dewatering and hauling technologies were evaluated, with considerations for capital cost, operation and maintenance cost, and non-financial factors such as renewable energy generation, greenhouse gas emissions/offsets, diversity of end-use options, odors, truck traffic, and local control of end use product at this 30 MGD facility. In addition, the Palo Alto City Landfill adjacent to the RWQCP provides options utilizing landfill biogas. The combination of scores resulted in a cumulative "Benefit" score for each biosolids option. Without consideration of the project cost, Thermal Hydrolysis received the highest benefit score. Ultimately, thermal hydrolysis and anaerobic digestion were chosen by Palo Alto. The project team conducted a pre-design for the staged process: 1) design and build the dewater/loadout facility, 2) decommission the multiple hearth furnaces, and 3) design and build the thermal hydrolysis and anaerobic digestion facility. **Size:** 30 MGD **Cost:** $30M **Role:** Senior Technology Consultant

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Southeast Plant Biosolids Digester Facility Project, San Francisco Public Utilities Commission (San Francisco, CA)	2017	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Dru led the anaerobic digestion planning, conceptual engineering, and 35% design for this project. He also successfully led the decision-making methodology development and process for the planning phase. The planning phase examined four system-wide alternatives to meet Class A Biosolids including Temperature Phased Anaerobic Digestion, Thermal Hydrolysis and Mesophilic Anaerobic Digestion, Anaerobic Digestion and Offsite Composting, and Anaerobic Digestion and Thermal Drying. In six months, Dru led a large, complicated consulting team (consisting of Brown and Caldwell, CH2M, and Black and Veatch with 20+ sub-consultants) along with a sophisticated client to make a decision, resulting in SFPUC choosing thermal hydrolysis and anaerobic digestion. The new facility will include an entirely new solids process train on a "brown field" site. **Size:** N/A **Cost:** $1B **Role:** Anaerobic Process and Decision-Making Lead

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Water Renew Program, Utah Department of Public Utilities (Salt Lake City, UT)	2017	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In this $500M program to improve wastewater collection in the northwest quadrant of Salt Lake City, rehabilitate existing sewer lines, and prepare the WRF for a major infrastructure and nutrient removal upgrade, Dru led the initial framework, planning, and assessment of the wastewater master planning. The Program is expected to be completed by 2025. **Size:** N/A **Cost:** $500M **Role:** Lead Technologist

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
David Sudibyo, PE	Plant Hydraulics; Pumping Systems	20	19

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Denver, CO)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Mechanical Engineering	Professional Engineer (CO)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

David is a mechanical engineer with 19 years of experience. His main responsibilities include designing and creating engineering documents for construction, providing technical review on design documents and engineering services during construction. David is experienced in the field of hydraulics design and analysis of both gravity and pressurized networks. He also has diverse experience in all phases of the project lifecycle including site assessment, feasibility study, master planning, concept design, alternatives modeling, detailed design, construction, commissioning and start-up, and operations of both small and large wastewater and water treatment plants, water conveyance, and pumping stations

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
19007 Aeration Basins and Secondary Clarifiers Facility Expansion (Clark County, NV)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: David was engaged with the delivery team for CCWRD's project 19007. He was leading the hydraulic design and evaluation and serving as a technical reviewer for mechanical design. This project included a 93 MGD expansion of CCWRD's secondary treatment biological nutrient removal (BNR) that will be delivered in two phases. The process included six aeration basins, and six secondary clarifiers designed for biological phosphorus removal and nitrogen removal. It also included support facilities such as blower building, electrical building, and return activated sludge and waste activated sludge (RAS/WAS) pump stations. The project was delivered through CMAR approach with Phase 1 construction cost estimated as $160M. **Size:** 93 MGD **Cost:** $160M **Role:** Hydraulic Lead and Mechanical Technical Reviewer

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Mouse River Enhanced Flood Protection Project (MREFPP) Phase 1, Broadway Lift Station (Minot, ND)	2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: David served as a project technical lead/design manager for the complete design of Broadway Lift Station Project as part MREFPP Phase 1, in City of Minot, North Dakota. The project involved coarse screening and pumping station utilizing a total of 2,300 HP vertical turbine and submersible type pumps to convey 270 MGD storm water from the city storm sewer collection system into Mouse River. Responsibilities include leading the design team, managing and ensuring quality of technical deliveries from design phase to construction documents. David also provided engineering services during construction. **Size:** 270 MGD **Cost:** $1.2M **Role:** Design Manager and Project Engineer

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Secondary Bypass to New Outfall Evaluation, Ashbridges Bay Treatment Plant (ABTP) (Ontario, Canada)	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: David served as the lead engineer creating hydraulic models and performing hydraulic analysis of the wastewater treatment plant to identify the existing capacity bottleneck, flow splitting, and to evaluate options for the primary effluent conveyance through the treatment plant during secondary treatment bypass to a new outfall with total flow up to 819 MGD. The hydraulic modeling and analysis included 12 primary clarifiers, 11 aeration basins and secondary clarifiers, two separate secondary bypass conveyance systems, a new UV disinfection facility, a new plant outfall structure, flow control-split structures, and both dedicated and common large hydraulic conduits connecting the treatment processes. **Size:** 819 MGD **Cost:** $427K **Role:** Hydraulic Lead

d.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
PAR 1304 - 2018 District-Wide Facility Plan (Denver, CO)	2019	N/A

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ **Check if project performed with current firm**

Scope: David created hydraulic models and performed hydraulic analysis of the entire Robert W. Hite Treatment Facility Plant, that is composed of North and South treatment complexes located at one site, to identify the existing hydraulic capacity, bottleneck, flow splitting and potential modifications as part of the Facility Planning Project for treating up to 470 MGD. The $3M 2018 Facility Plan establishes short-term and long-term project recommendations, process selection, and implementation schedules to meet the District's planning and regulatory drivers for the next 20 years. To address planning and regulatory and TBL drivers over the next 20 years, Stantec partnered with the District to identify short and long-term CIP projects with a focus on innovation, adaptation, and resilience. The projects included a complete assessment of the existing processes and overall planning drivers, development of alternative analysis, and integrated solutions, which were compiled and prioritized on a capital expenditure schedule. The District serves approximately 1.8 million people in the Denver metropolitan area by providing wastewater transmission and treatment services to 22 member agencies and 26 special connectors over a 715-square mile area. **Size:** 715 square-miles **Cost:** $3M **Role:** Hydraulic Lead

e.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Enlozada Wastewater Treatment Facility Sociedad Minera Cerro Verde (Arequipa, Peru)	2015	2016

(3) BRIEF DESCRIPTION*(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: David served as the lead engineer performing hydraulic modelling and analysis for the entire green field treatment plant design consisting of two separate plant sites and couple miles of conveyance lines. The plant facilities were designed to treat predicted various plant flow rates from 17 MGD to 108 MGD. The treatment facility includes coarse screening and grit removal, high-pressure lift station, primary and secondary clarifiers, trickling filters/solids contact secondary treatment and sodium hypochlorite disinfection. Reclaimed effluent will be used as a process water supply for a local mine. In addition, David served in the project as the mechanical lead engineer to design 83 MGD total capacity headworks which utilizes 6 mm step screens, aerated grit separators, and scum removal and concentrator. Included in the headworks scope was designing over 13,000 scfm biological odor control system and overall process and building drainage systems for the facility. David also served as a field engineer managing equipment procurement and vendor submittals, providing evaluation of contractor bids and shop drawing technical review, and providing engineering support and services during construction. **Size:** 83 MGD **Cost:** Unknown **Role:** Hydraulic Lead, Mechanical Lead, and Field Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **1**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Sand Island Wastewater Treatment Plant (SIWWTP) Secondary Treatment Phase 2 Expansion (Honolulu, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City & County of Honolulu Wastewater Engineering and Construction Division	Trudy Hamic	808-768-8740

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec, with Joint Venture (JV) partner, RM Towill Corporation (RMTC), was selected by the City and County of Honolulu (CCH), Environmental Services Division (ENV) to complete the Planning and Design Phases of SIWWTP. SIWWTP is the largest treatment plant in Hawaii, serving Honolulu and surrounding areas and treating an average flow of 65 million galls per day (MGD), with a wet weather peak flow of 240 MGD. This facility currently provides preliminary treatment, chemically enhanced primary treatment, and UV disinfection prior to ocean discharge through a 2.4-mile outfall. CCH recently began construction of a 20 MGD membrane bioreactor (MBR) facility as Phase 1 of the secondary expansion. Phase 2 of the expansion will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. The Phase 2 project is currently in the Planning Phase.

KEY RELEVANCE

Scope:
- Secondary Treatment Expansion
- Once constructed, the plant will be the largest AGS technology facility in North America
- Largest plant expansion at Sand Island WWTP since original construction

Cost: $1.5B

Key Personnel:
- Sarang Agarwal
- Bob Armstrong
- Michael Reed
- Billy Wong
- Art Umble
- Heather Stephens
- Zakir Hirani
- Dru Whitlock
- David Sudibyo

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Joint Venture
b	RM Towill Corporation	Honolulu, HI	Joint Venture
c	Stantec Consulting Services Inc.	Walnut Creek, CA	Joint Venture

d	Stantec Consulting Services Inc.	Denver, CO	Joint Venture

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **2**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Bioconversion Facility Digestion Capacity Upgrades (Honolulu, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Synagro	Brian Cataldo	207-402-1693

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

SIWWTP is currently designed to provide 90 MGD of primary treatment. The purpose of this project is to evaluate solids handling requirements for Phase 1 2035 conditions. The major scope of work items are upgrades to the solids stream process, including two new anaerobic digesters each of 2.35 MG capacity and associated ancillary equipment (such as mixing pumps, boiler, heat exchanger, etc.), and two new sludge storage tanks to provide additional storage capacity. Stantec also developed a long-range plan for future implementation of Combined Heat and Power (CHP) and generation of electricity for use within the treatment plant and a general approach to instrumentation and supervisory control and data acquisition (SCADA) systems. Other evaluations were conducted with respect to identifying footprint for future Phase 2 Solids facilities inclusive of thermal hydrolysis, additional digesters, new dewatering, and dryer facility along with a fats, oils, and grease (FOG) and a high strength waste (HSW) facility.

Scope: Stantec is a subconsultant providing design services for digester ancillary systems, and technical advisory services for the digester and ancillary systems. Design will also include preparation of startup and commissioning plan for the system upgrades.
Size: N/A
Cost: $1 M
Key Personnel:
- Sarang Agarwal
- Bob Armstrong
- Michael Reed
- Art Umble
- Heather Stephens
- Dru Whitlock
- David Sudibyo

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	R.M. Towill Corporation	Honolulu, HI	Prime Consultant
b.	Stantec Consulting Services Inc.	Honolulu, HI Pasadena, CA	Subconsultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **3**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui Hazard Mitigation Plan Update (Maui, HI)	2020	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui	Jamie Caplan	413-586-0867

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec developed the risk assessment for the 2020 Maui County Hazard Mitigation Plan (as a subconsultant to JCC). The plan included the island of Maui and the outer islands of Moloka'i, Lāna'i, and Kāho'olawe. We assisted the County to identify hazards (natural and man-made) and to assess current and future vulnerability including climate change). For each hazard, Stantec evaluated current and future hazard probabilities, severity, and impacts.

Examples of hazards included are sea level rise, coastal erosion, extreme heat, vog, hazardous materials incident, and public health risks (including infectious disease and pandemic).

- **Scope**: Hazard Mitigation Plan
- Climate Change Vulnerability Assessment
- Economic Valuation of Risk
- Social Vulnerability
- Public Outreach

Size: Maui County
Cost: $54K
Key Personnel:
- Christine Hurley

The risk assessment includes consideration of all available structures (i.e., residential, commercial, government, etc.) and critical assets including community lifelines such as water utilities, power, emergency services, ports, and schools. An estimated dollar loss was estimated for each asset as data permitted and included the use of FEMA's Hazus-MH, a hazard loss estimation software, for flood, earthquake, and tsunami hazards. The plan also integrated FEMA Community Rating System (CRS) requirements such as assessment of life safety, warning and evacuation Impacts, economic impacts, and social considerations for each hazard. A social vulnerability index (SVI) was developed which was aligned to hazards by the Stantec team. Plan results were presented at the structure level and grouped using Maui County's eight community planning areas in alignment with the county's comprehensive plan. Community planning areas are also a benefit to hazard impact evaluation as they group areas by region, allowing for more precise impact considerations across the county due to variations in topography, wind and rainfall patterns, and coastal conditions, among other characteristics.

In addition to developing the risk assessment, Stantec assisted with outreach including on island and virtual public and hazard mitigation planning team meetings on Maui and Molokai. Our FEMA-compliant risk assessment informed the county's mitigation strategy, an actionable set of infrastructure, nature-based, and policy activities to reduce future disaster impacts. The plan passed FEMA compliance review on the first pass, making the county eligible for pre- and post-disaster hazard mitigation funding.

23. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **4**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Treasure Island Water Resource Recovery Facility (San Francisco, CA)	Ongoing	N/A

26. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
San Francisco Public Utilities Commission (SFPUC)	Brian Henderson	415-314-3701

27. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec is the lead designer for the Design Build of New TIF. At completion the facility will have the capacity of 1.5 MGD with peak weather flow of 3.9 MGD. SFPUC has endorsed specific, measurable goals and objectives that will be utilized to evaluate program implementation and success. The goals and Levels of Service (LOS) when complete comprise of a full built-out facility that meets treatment requirements and provides operational flexibility for four-phase construction approach with treating increasing influent flow capacities conditions--being built concurrently with the development schedule of the island.

KEY RELEVANCE

Scope:
- Design for design build
- Membrane bioreactor wastewater treatment facility
- Site civil design
- Green infrastructure
- Constructed wetland

Size: 1.5-3.9 MGD
Cost: $15M
Key Personnel:
- Jim Rasmus, Water/Stormwater Lead
- Billy Wong
- Ed Othmer Jr., Stormwater QC

The TIF will:

- Meet the SFPUC effluent and reclaimed water criteria outlined in the Request for Proposal Technical Narrative, Title 22 requirements, and National Pollutant Discharge Elimination System (NPDES) permit requirements.
- Consist of mostly automated equipment that can be controlled by a supervisory control and data acquisition (SCADA) system or from the Southeast Plant.
- Have odor control, noise abatement, security in compliance with the Lenel System, fire protection and fire alarms in compliance with local City codes, and a robust power supply connected to the adjacent switchyard.
- Meet SFPUC criteria for on-site stormwater management using a bio-retention basin that captures stormwater from the TIF site and, after treatment, conveys this stormwater to a two-cell constructed wetlands where it will be blended with recycled water for polishing prior to reuse.
- Have architectural features and public art as an amenity to the Treasure Island/Yerba Buena Island community.
- Achieve Envision Gold sustainability standards
- Have overall redundancy for each major unit process element

The raw wastewater collected in the Treasure Island/Yerba Buena Island collection system will be pumped to the TIF to be processed into recycled water and conveyed to the wetlands or a non-potable recycled water distribution system.

20. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Walnut Creek, CA; San Diego, CA	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY
Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
5

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
100 Resilient Cities (100RC) Technical Support to Honolulu Assessment of Ala Wai Flood Mitigation Project (Honolulu, HI)	2018	N/A

28. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu Office of Climate Change Sustainability and Resiliency	Matthew Gonser	808-748-2262

29. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The City and County of Honolulu (CCH), State of Hawai'i, and USACE Honolulu District are currently reviewing design features and negotiating terms of the partnership agreement with the State, County, and City of Honolulu for the construction of the Ala Wai Watershed Flood Mitigation Project.

KEY RELEVANCE

Scope:
- Climate change
- Resiliency and sustainability
- Flood mitigation
- Environmental engineer
- Hydraulics

Size: N/A
Cost: $100M+ (construction)
Key Personnel:
- John Malueg, Technical Subject Matter Expert
- Bob Armstrong, Technical Advisor

The primary objective of the proposed project is to reduce flood risk in Manoa, Palolo, Waikiki, and parts of Makiki and Mo'ilili neighborhoods. The estimated population at risk included approximately 65,000 residents and an additional 200,000 transient daily visitors. An estimated 3,000 structures are at flood risk to a one percent (a 100-year event) probable storm event, with potential damages exceeding $1 billion. The project features include:

- Six debris/stormwater basins in the upper reaches of Maikiki, Manoa, and Palolo streams
- One in-stream debris catchment structure
- Three multi-purpose stormwater detention basins
- Flood Control Elements along the Ala Wai Canal
- Flood warning system (non-structural)
- Fish and wildlife mitigation (non-structural)

Through the auspices of the 100RC, The CCH retained Stantec on a pro-bono basis to review the proposed USACE FS study level designs and provide general support services to the City with respect to develop conceptual alternative designs/adjustments to existing designs for potential inclusion in the USACE's Ala Wai Canal Food Risk Mitigation project. General support included assisting the City identify opportunities for place-making. Increased community use and acceptance, enhancing the local economy, achieving improvements in stormwater runoff management while achieving (or expanding) the project's flood mitigation focus. More specific scope tasks included assisting the City identify opportunities to quantify (monetize) the flood risk mitigation, social, economic and environmental benefits achieved by proposed new or modified key project elements, particularly in terms of USACE recognition of in-kind local contribution to the project.

Analysis provided included consideration of impacts to overall project costs, feasibility, permeability, constructability, and schedule. Our team worked closely with the CCG Department of Design and Construction to focus on features of greater interest to the community and produced multiple alternatives for design and location of canal areas and walls and levees, inclusion of park areas, incorporation of ongoing complete streets planning, CCH goals for multi-modal transport.

20. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **6**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu Prime: Kennedy Jenks Consultants	Phil Potter	808-488-0477

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

For over 15 years, Stantec GS has provided stormwater monitoring and reporting services for the City and County of Honolulu.

Stantec has performed stormwater samples at 75 industrial facilities throughout the island of Oahu in compliance with the City and County of Honolulu's Municipal Separate Stormwater Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) permit.

The effort has included investigation, planning, and installation of remote water quality and atmospheric monitoring stations to collect first-flush stormwater samples according to 40 CFR 136 and EPA guidelines.

KEY RELEVANCE

Scope:
- NPDES MS4 permit storm water monitoring and reporting

Size: N/A
Cost: $462K (2022)
Key Personnel:
- Ben Berridge, Project Manager

Stantec designed telemetered monitoring stations that incorporate data logged by automated sampling equipment and water quality sensors, area-velocity sensors, and pressure transducers, providing records of flow and site conditions and tracking/archiving weather. Stantec provides quality assurance and quality control (QA/QC) oversight, coordinates 24/7 on-call teams for grab/composite sample collection, maintains rainfall-runoff curves, monitors automated sampling equipment, and prepares monthly status reports.

The NPDES permit required first flush samples from the permitted facilities. Stantec faced challenges monitoring a large number of City facilities with capturing the "first flush" of significant storm events. This required staff to monitor a large number of facilities across the island during fairly short storm event periods. In order to overcome the challenges Stantec faced state of the art telemetered monitoring stations were equipped with discrete alarming systems based on site and atmospheric conditions. The alarms and the quick-moving sampling teams were able to effectively monitor several facilities during large events. In addition, a priority-based weight risk scoring system was established with State of Hawai'i Department of Health (HDOH) to determine the facilities that have the potential to have the highest impact to water quality and prioritize these facilities. The strategies allowed for a cost-effective solution to the challenges the NPDES permit requirements presented.

20. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec GS Inc. (formerly Cardno GS, Inc.)	Honolulu, HI	Subcontractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **7**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Multiple Projects, Metro Wastewater Reclamation District (Denver, CO)	PAR 1304 – 2019 PAR 1280 – 2020 PAR 1237 - 2018	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Metro Wastewater Reclamation District	Sherman Papke	303-286-3390

23. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec has an extensive history working with MWRD extending back to 2010. Much of the Stantec team proposed for the Fort Collins' Engineering Services for Water Reclamation and Biosolids Facility Design and Construction Management project have had significant engagement on the projects we have completed for MWRD and have gained experience and insight into the delivery of projects very similar to what the City is planning to engage.

For the PAR 1237 – Sidestream Nutrient Removal Project, MWRD needed to optimize their plant-wide performance of nutrient removal (N and P) facilities and collect sufficient data in order to right-size the design of future tertiary facilities, which will be required to achieve stringent nutrient permit limits. Stantec preformed the preliminary and final design of improvements to the RWHTF, resulting in the largest biological nutrient removal upgrade project in Colorado. This project upgraded the North Secondary Treatment Complex to operate as a full-plant biological phosphorus removal process via a novel side stream anaerobic reactor approach that greatly minimized construction costs. It involved preliminary and final design of a sidestream enhanced biological phosphorus removal (EBPR) process. The improvements to the North Secondary process meet Water Quality Control Commission (WQCC) Regulation No. 85 limits to achieve less than 1 mg/L of Total Phosphorus (TP) and less than 15 mg/L of Total Inorganic Nitrogen (TIN). The critical improvements to the North Secondary Complex included retrofitting two existing aerated centrate treatment trains to sidestream anaerobic reactors by adding vertical shaft mixers, modifying existing influent and effluent hydraulic structures, and retrofitting existing surface scum skimmer troughs for improved removal. Another major project component of the project included the design and construction of a 1 mgd sidestream (centrate) treatment deammonification process to reduce the return flow of nitrogen from anaerobic digestion and dewatering process. This involved the ANITA Mox anammox process in a single-stage reactor, the largest of its kind in the world. Related improvements included gravity thickener upgrades, primary sludge fermentation to provide a VFA source to the EBPR process, and thickened sludge pumping improvements.

The PAR 1304 – 2018 Facility Master Plan establishes short-term and long-term project recommendations and implementation schedules to meet the MWRD's planning and regulatory drivers for the next 20 years. The MWRD serves approximately 1.8 million people in the Denver metropolitan area by providing wastewater transmission and treatment services to 22 member agencies and 26 special connectors over a 715-square-mile area. To address planning and regulatory and TBL drivers over the next 20 years, Stantec partnered with the District to identify short and long-term capital improvements with a focus on innovation, adaptation, and resilience. The projects included a complete assessment of the existing processes and overall planning drivers, development of alternative analysis, and integrated solutions, which were compiled and prioritized on a capital expenditure schedule.

Stantec's work with the MWRD focused on the interconnectivity and relative impacts between the facilities, other stakeholders (municipalities, industries) beyond the RWTF's fence line, and the natural environment. We executed 23 workshops and completed 1 technical memorandum, in addition to focused meetings and site visits. This avoided surprises and maximized partnering and stakeholder alignment. The project was delivered on time and within budget. The PAR 1280 – Nuisance Struvite and Dewaterability Improvements project included the RWHTF liquid and solids stream processes to mitigate phosphorus recycle load impacts on main plant BPR capacity, increased nuisance magnesium ammonium phosphate (struvite) formation in solids stream treatment processes, and deterioration of digested sludge dewatering performance. The project included the design and construction of three work packages totaling over. $22M to install a phosphorus recovery reactor (AirPrex) and facility designed to precipitate struvite out of the digested sludge. This is the largest such AirPrex reactor in the world.

With the successful implementation of plant-wide Bio-P at the 220 MGD RWHTF, the Metro District experienced significant unintentional struvite precipitation and deposition in its biosolids treatment train. The negative impacts of struvite were seen throughout the plant, including deposition in digesters, blockage of digestate and centrate pipelines, significant reductions in biosolids dewaterability, and increased effluent phosphorus concentrations due to the unmitigated recycling of phosphorus from biosolids to liquid stream.

Stantec developed conceptual designs and a triple bottom line comparative analysis, inclusive of sustainability considerations, to evaluate and compare three phosphorus management solutions, including: (1) centrate chemical sequestration, (2) pre-dewatering sequestration/recovery with MagPrexTM, and (3) centrate and phosphate-stripped WAS recovery using Ostara Pearl® and WASSTRIPTM. This evaluation included sensitivity analyses, examination of the local struvite revenue markets and clarifying the impacts of 503 Regulations on the testing provisions necessary for recovered struvite products.

The analysis determined that pre-dewaterating phosphorus recovery/sequestration provided the best approach to the Metro District for needing their site-specific needs. To aid in project delivery, Stantec split the delivery of the phosphorus recovery improvements into three work packages. The first work package procured the core recovery equipment and reduced lead times associated with shop drawings and delivery. The secondary package allowed for an early start and completion of the preparatory site civil improvements while the design of the third package, consisting of all above ground improvements, was completed. Stantec has provided construction phase engineering services and commissioning of the system is currently ongoing.

The project enabled the MWRD to meet Colorado Department of Public Health and Environment's (CDPHE) Voluntary Incentive Program for Early Nutrient Reductions, which would extend the RWHTF's deadline to comply with Regulation 31.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Denver, CO	Prime
b.	Stantec Consulting Services Inc	Boston, MA	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **8**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hyperion 2035, Water Reclamation Plant (Los Angeles)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Los Angeles	Hubertus (Huub) Cox	310-648-5001

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The City of Los Angeles' Hyperion 2035 Program is a key initiative in achieving the ambitious goals established by the Mayor of locally sourcing 70% of Los Angeles' water and recycling 100% of the wastewater tributary to Hyperion by producing potable water in 2035. Achieving these goals requires a major transformation of the City's largest treatment plant, Hyperion Water Reclamation Plant (Hyperion WRP), from current processes and systems to a potable water production facility employing MBR and AWT processes. Plant modifications present a multi-billion-dollar investment over more than a decade.

KEY RELEVANCE

Scope:
Employing MBR and AWT processes
Size: 1-1.5 MGD
Cost: $3.48 B (Program), $13M (MBR Pilot Facility), $60M (HAWPF)
Key Personnel:
- Art Umble, Resilience QA/QC
- Bernadette Callahan, Project Manager/Green Infrastructure Lead

Stantec, in association with another firm, is assisting the City in developing both the program planning framework as well as the engineering design to guide implementation. This includes developing the Program Management Plan (PMP) for administrative guidance and the Program Implementation Plan (PIP) that serves as the technical roadmap defining processes and their design basis. In addition to PMP and PIP development, two projects are under construction:

- Pilot Facility: 1-MGD MBR pilot testing facility to obtain regulatory approval of the planned process train. Testing includes three different MBR suppliers and two RO systems. Stantec designed the facility, developed the test plan, and is supporting the construction that is nearing completion.
- Hyperion Advanced Water Purification Facility (HAWPF): 1.5-MGD proof-of-concept plant with MBR, RO, UV-AOP that will serve non-potable uses at the Los Angeles International Airport. Stantec developed the conceptual design and is serving as the Owner's Engineer for this first alternative delivery project for the City as progressive design build

Hyperion Membrane Bioreactor (MBR) Pilot Facility

The Hyperion WRP currently produces non-nitrified secondary effluent using an HPOAS process. Based multiple factors including spatial and water quality consideration, MBR was selected to convert the Hyperion WRP to a nitrifying-denitrifying facility. In order to obtain regulatory approval of an MBR-RO-UV-AOP process train and to determine the optimum design basis, an MBR pilot facility was designed and is under construction. The facility includes three different MBR membrane systems; will treat up to 1.0 MGD of primary effluent; and includes a 2-mm fine drum screen, a bioreactor tank and three parallel membrane filtration systems with associated equipment. The MBR filtrate will feed the two, three-stage RO systems, each capable of reconfiguration for operation as a two-stage system.

The facility will treat to achieve IPR water quality standards. There are also plans to modify the pilot facility to include processes required for DPR standards.

This 1.5-MGD advanced treatment facility will provide high-quality water to the Los Angeles World Airport for non-potable uses. Stantec is serving as the Owner's Agent for project delivery, and Stantec team member Rob McCandless served as the process engineer for the design-build team. The processes employed include fine screens, membrane bioreactors, RO and UV-AOP. Also included are product water pumping, conveyance, and storage facilities.

Project Owner and Designer Coordination

In conjunction with the City, Stantec led a Recycling Spatial Feasibility Study that assessed the viability of constructing all new treatment and support facilities that would allow for the future recycling and reuse at the existing Hyperion WRP. The study

evaluated complex set of options and criteria and multiple workshops were held with the client. The study led to the selection of a single-process approach with MBR, and a third-party evaluation of the options reached the same conclusion.

In addition, for all other major tasks, including the HAWPF and MBR Pilot Facility, Stantec has collaborated closely with City personnel across disciplines, including operations, maintenance, engineering, and construction management.

Permitting

For the HAWPF, Stantec helped the City with the preparation and approval of the Title 22 Engineering Report. The MBR Pilot Facility has a Testing and Monitoring Plan (TMP) prepared by Stantec and our consultant partners that has been validated by the DDW with input from the IAP.

Procurement

The HAWPF is being implemented using a PDB delivery approach – a first for LASAN. The result was the production of high-quality procurement documents that will also serve as a template for future projects. Documents developed for the procurement process included a Conceptual Design Report, a draft contract, draft general requirements and general conditions and the bid solicitation. Key equipment was pre-qualified as part of the engineering effort.

Startup and Commissioning

Startup and commissioning for both the MBR Pilot Facility and HAWPF are planned for the end of 2023 but are currently on hold due to permitting delays. Stantec will be providing startup and commissioning support for the MBR Pilot Facility, including on-site support during clean water testing, wastewater seeding and wastewater testing.

Stakeholder Management

The program and project designs have involved multiple stakeholders within the City of LA, multiple consultants and consultant teams working together, regulatory agencies and IAP. Stantec has facilitated various workshops and participated in regulatory and inter-departmental meetings through the durations of the designs mentioned and the program planning work.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Pasadena, CA	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **9**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Blue and Green Corridors Project (New Orleans, LA)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of New Orleans Project Delivery Unit	Mary Kincaid	504-658-8048

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Reflecting New Orleans' new "living with water" approach to water management, this project will transform major boulevards into a network of blue and green corridors to reduce flood risk while improving quality of life.

Located in Gentilly between Bayou St. John and Pontchartrain Park, this area of New Orleans suffers from frequent flooding and has a lack a facilitates to help residents lead healthy and active lifestyles. Our team developed comprehensive neighborhood re-envisioning to improve the resiliency, health, and economic framework of Gentilly. The topography of Gentilly is generally shaped like a bowl with the edges draining towards the middle and rainwater is collected in box culverts which are then pumped into the London Avenue canal. The existing pump station and storm network have shown to be overwhelmed during flood events causing damage to residences and property. The City of New Orleans, through the HUD National Disaster Resilience competition identified that the solution could not just be additional pumping, but that the future of New Orleans is about incorporating the water into residents' lives.

KEY RELEVANCE

Scope:
- Resiliency planning
- Green infrastructure
- HUD funding
- Hydraulic modeling
- Benefit cost analysis

Cost: $6.5M

Key Personnel:
- John Malueg, Resilience QA/QC
- Bernadette Callahan, Project Manager and Green Infrastructure Lead

Stantec re-envisioned the neighborhoods to use the large neutral grounds to store water during flood events and create beneficial water areas to enhance the community. This regional stormwater plan incorporates multiple solutions to bring the "living with water" concept to the area. Elysian Fields will have a beautifully planted canal with water features and play spaces to bring the community together. The other major avenues will have landscaped neutral grounds that reduce flooding and filter runoff. Green infrastructure interventions were designed to reintroduce water to the ground to reduce subsidence. A network of biking and pedestrian facilities was designed to create new connections to the places where the residents work, play, and live. Vacant lots have been repurposed to provide multiple uses for community spaces and stormwater management. Wooden walkways and piers travers over stormwater ponds while pavilions and active playgrounds provide destinations for families.

The project is funded by HUD, and we conducted a benefit cost analysis to show that the benefits of the improvements exceed the costs of the project. We quantified the improvements via a triple bottom line analysis to capture the benefits improvements to flood reductions, healthier lifestyles, and improved economic activity. The results showed that the project creates improvements to all three categories.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Winston-Salem, NC Raleigh, NC New Haven, CT	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY
Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
10

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Los Angeles River and Arroyo Seco Low Flow Diversion Projects (Los Angeles, CA)	Ongoing	Ongoing

a. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Los Angeles County Bureau of Engineering	Naushin Kamal	213-847-0342

b. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The LABOE and LASAN plan to divert nuisance flow during dry weather from existing storm drains to existing sanitary sewers. Previous studies have determined that the low flow that enters the Los Angeles River and the Arroyo Seco at five locations has particularly high bacteria concentrations which need to be intercepted before reaching these receiving water bodies and exceeding TMDL limits. It is imperative to have adequate trash separation before diverting flows to a sanitary sewer to prevent issues at a wastewater plant downstream. In April 2018, LASAN developed a Concept Report for the LFDs which have since been modified and brought to 100% design by Stantec.

KEY RELEVANCE

Scope:
- Design Services and Engineering Services During Construction

Size: N/A
Cost: $2.5M
Key Personnel:
- Ed Othmer Jr., Technical Advisor

This project evaluated at least three potential layouts for each of the five sites to reduce impact to the community during construction, help ensure ease of access for future operations and maintenance and optimize design to decrease LFD footprint while meeting project goals for low flow diversion. The five LFD sites are located in downtown Los Angeles which has made public outreach a critical component of project work. Stantec has completed the 100% project design and construction of the five sites is began in early 2022.

c. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Pasadena, CA	Primary Consultant

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN EXAMPLE PROJECT	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Sarang Agarwal	Project Lead	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐
Bob Armstrong	Water/Wastewater Lead & Contract Manager	☒	☒	☐	☐	☒	☐	☐	☐	☐	☐
Jim Rasmus	Water and Stormwater Lead	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐
Michael Reed	Project Manager	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐
Billy Wong	Deputy Director	☒	☐	☐	☒	☐	☐	☐	☐	☐	☐
Ed Othmer Jr	Stormwater/Wet Weather Flow	☐	☐	☐	☒	☐	☐	☐	☐	☐	☒
John Malueg	Resilient Infrastructure Lead	☐	☐	☐	☐	☒	☐	☐	☐	☒	☐
Christina Hurley	Senior Hazard Mitigation Planner	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐
Benjamin Berridge	Environmental Planner	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐
Bernadette Callahan	Green Infrastructure Lead	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐
Heather Stephens	Senior Environmental Engineer Or Senior Principal Wastewater Engineer	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐
Zakir Hirani	Technical Advisor - Biosolids	☒	☐	☐	☐	☐	☐	☐	☒	☐	☐
Dru Whitlock	Technical Advisor - Biosolids	☐	☒	☐	☐	☐	☐	☒	☐	☐	☐
David Sudibyo	GIS Analyst	☒	☒	☐	☐	☐	☐	☒	☐	☐	☐

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Sand Island Wastewater Treatment Plant (SIWWTP) Secondary Treatment Phase 2 Expansion	6	City and County of Honolulu NPDES MS4 Monitoring
2	Bioconversion Facility Digestion Capacity Upgrades	7	Multiple Projects, Metro Wastewater Reclamation District
3	Maui County Hazard Mitigation Plan Update	8	Hyperion 2035 Program

4	Treasure Island Water Resource Recovery Facility	9	Blue and Green Corridors Project
5	100 Resilient Cities Technical Support to Honolulu Assessment of Ala Wai Flood Mitigation Project	10	Los Angeles River and Arroyo Seco Low Flow Diversion Projects

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

The Stantec Advantage

Stantec empowers clients, people, and communities to rise to the world's greatest challenges at a time when the world faces more unprecedented concerns than ever before.

We are a global leader in sustainable engineering, architecture, and environmental consulting. Our professionals deliver the expertise, technology, and innovation communities need to manage aging infrastructure, demographic and population changes, the energy transition, and more.

Today's communities transcend geographic borders. At Stantec, community means everyone with an interest in the work that we do—from our project teams and industry colleagues to our clients and the people our work impacts. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure.

We are designers, engineers, scientists, project managers, and strategic advisors. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at Stantec.com or find us on social media.

The Stantec community unites more than 32,000 employees working in over 450 locations • We collaborate across disciplines and industries to bring buildings, energy and resource, and infrastructure systems to life. Our work – professional consulting in planning, engineering, architecture, landscape architecture, surveying, environmental sciences, project management, and project economics- begins at the intersection of community, creativity, and client relationships. With thousands of employees on six continents, Stantec offers a global team of program managers, business consultants, engineers, geologists, operators, scientists, technologists, and regulatory experts who provide solutions to the world's most challenging projects.

One Stantec team • Stantec Consulting Services Inc. and Stantec GS Inc. staff collaborate as one united Stantec team. Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan. Cardno GS, Inc., now known as Stantec GS Inc., was acquired by Stantec on December 6, 2021. Since 1989, Stantec GS Inc. has provided environmental, A-E, and other asset management services for our clients in Hawai'i. Stantec GS Inc. is an operating division of Stantec Inc. and has historically focused on meeting the needs of our municipal, state, federal agency, and commercial clients.

Global resources with island attitude • We have an 72-person strong Honolulu operations team with our principal office located in American Savings Bank Tower of Bishop Park, as well as 21 additional staff in the Stantec GS Inc. Honolulu office. Stantec has been working in Hawai'i supporting our community on projects, including working with the Environmental Services Department (ENV) on the Phase 2 Expansion for Sand Island Wastewater Treatment Plant; working with the Office of Climate Change, Sustainability, and Resiliency together with Department of Design and Construction (DDC) on integrating greener and community friendly alternatives into the proposed Ala Wai Flood Mitigation project; construction management for the HART Honolulu Rail Transit Project; harbors master planning for HDOT as a subconsultant; environmental impact assessments for government and commercial clients; mapping for the County of Hawai'i; and risk and resiliency planning for County of Maui. We believe that creating a team that engages the right people is key to project success. Our team offers expertise through our local staff on O'ahu, Maui, and Hawai'i Island, along with relevant support staff and subject matter experts in Western United States—plus all the 32,000+ professionals in our global Stantec network. This gives us the flexibility to respond to any project challenge in a timely and efficient manner to keep your projects on track. We have the diverse experience necessary to tackle even your most unique challenges.

We have approached this submittal in a way that we believe provides the County of Hawaii with information on the depth and breadth of our capabilities, as well as information on specific projects and staff. We understand that in doing this, Section G of this form may not demonstrate the overlap, we would usually present in a direct RFQ. Staff relatively new to Stantec bring a wealth of technical experience and in several cases experience in Hawai'i with other firms. Another important feature of Stantec is our proven track record of integrating multiple disciplines into projects; it's all a part of designing with communities in mind and ensuring projects achieve all potential benefits.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Stantec is a national leader in all aspects of environmental engineering • We integrate this expertise with all of our service areas presented below.

Community Development
- Master Planning
- Urban Design
- Landscape Architecture
- Design Visualization
- Stakeholder Consultation
- Brownfield Redevelopment
- Civil Engineering
- Watershed Studies
- Stormwater Management
- Earthworks Analysis/Lot Grading Design

Flood Control Facilities
- Dams and Levees
- Concrete Lined channels
- Storm Drain networks
- Pumping Stations
- Retention and Outfall structures
- Stormwater Quality and Treatment

Environmental Services
- Assessments, Permitting,
- and Compliance
- Terrestrial and Marine Sensitive Species Surveys
- Ecosystem Mitigation and Restoration
- Archaeology and
- Heritage Resources
- Groundwater Resources
- Management
- Brownfields Assessment
- and Remediation
- Site Investigation and Remediation
- Risk Assessment

Survey/Geomatics
- Boundary and Cadastral Surveys
- Topographic Mapping
- Linear Infrastructure Design
- Wastewater Reclamation and Reuse
- Wet Weather Flow Management
- Construction Stakeout
- Geodetic and Control Surveys
- As-Built Surveys
- 3D Laser Scanning

Geotechnical Engineering
- Subsurface Explorations
- Foundation and Retaining Systems
- Geotechnical Lab Testing
- Materials Investigations
- Seepage Analysis/
- Dewatering Studies
- Slope Stability Analysis
- Settlement Analyses

Water/Wastewater
- Water and Wastewater
- Municipal and Industrial Wastewater Treatment and Water
- Water Supply, Storage Facilities and Distribution Systems
- Pumping Stations
- Trenchless technologies

Transportation Planning and Traffic Engineering
- Transportation Master
- Planning/Modeling
- Travel Forecasting
- Traffic Impact Assessments
- Access Management
- Traffic Calming Solutions
- Safety Assessments

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Stormwater Quality

Redesigning the urban environment to better handle wet weather is more sustainable, less expensive, and easier to manage. That's why we focus on first understanding what a community's existing system can handle, how it can be optimized, what users can afford, and where money is best spent. And with larger storms and more urbanization comes increased flows that bring with them significant flooding and pollution concerns that must be proactively addressed. This is where our experience managing and delivering some of the world's largest stormwater management programs and projects lets us find the best solution for each situation.

Stantec's Water Resources services encompass a wide range of expertise and knowledge, including floodplain delineations; flood control design; bridge hydraulic design; drainage infrastructure design; watershed hydrology; sediment transport analysis; drainage design manuals; training programs; alluvial fan analysis; stormwater management studies; computer modeling; and drainage master plans. Stantec's services also incorporate critical inclusion of client and stakeholder input through public participation. In addition, the development of regulatory and management solutions versus structural alternatives is an expertise of our staff. Projects often include multi-objective components, such as open space habitat and recreation. Public education concerning the multi-objective benefits that water resources play in a community is a key component of our approach and assists our clients by gaining broad-based support for their initiatives.
We provide complete services for stormwater services from conveyance and drainage design to permitting and stormwater quality treatment:

- Blue Green Corridors and Complete Streets
- Flood Modeling
- Hydraulic Modeling
- Asset Management
- Hydraulic Structures
- Pump and Lift Stations
- Stormwater Permitting Assistance (Construction, Industrial, and Commercial Sources)
- Storm Water Pollution Prevention Plans (SWPPPs)
- Site Specific Sediment and Erosion Control Plans
- Inspections and Monitoring
- Best Management Practice (BMP) Design
- Training
- Nature-based solutions

Blue Green Corridors • The "Living with Water" approach to resilience aims to lessen the burden on the City's stormwater system by introducing green infrastructure practices and strategic storage solutions. By constructing vegetated systems that are capable of managing stormwater runoff, natural elements are used to increase resilience. Stormwater bumpouts and rain gardens are two pieces of green infrastructure that mimic the natural environment, slow stormwater runoff, and allow it to infiltrate back into the ground. Complete Streets is also part of the community-focused project – streets that prioritize safety, comfort, and access for everyone who uses a street: walkers, runners, bikers, and vehicles. It all adds up to a holistic, community-based perspective on resilience. Our stakeholder-centered approach supports communities in reducing flood risk, reducing subsidence, improving the community's quality of life, and encouraging economic growth and social revitalization.

Flood Modeling • Trying to predict the likelihood of a major flood event isn't a new effort—but with an increase in communities experiencing flooding and dealing with the aftereffects, it's more important than ever that we do it better. Stantec has developed Flood Predictor, a secure, cloud-based solution that provides insights on when and where a flooding event is likely to happen. It is powered by data and engineering features, creating a first-of-its-kind methodology that can analyze flood hazards, project future climate scenarios, incorporate local adaptation, and validate government records. Using machine teaching and learning to provide accurate, data-driven results in near real time, it can help you optimize the way you make decisions. And with risk information delivered in mere seconds, getting ahead of a major flood event just became possible.

Hydraulic Modeling • Stantec has a specialized, integrated team of hydraulic modelers with significant experience in developing, calibrating, testing, and analyzing computer models that simulate the hydraulics of stormwater systems. Our hydraulic modeling team also includes personnel with experience in related specialized fields such as real time control and transient/water hammer modeling. To help ensure we meet our clients' needs, Stantec maintains active license agreements for a variety of hydraulic modeling programs from numerous software providers. We have also integrated the services of our hydraulic modelers located in different offices throughout the company in a manner that allows us to

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

collaborate on projects, share access to modeling tools, and exchange ideas all to ensure our clients have access to the expertise and experience of our employees.

Asset Management • Today, aging infrastructure, increasingly stringent stormwater quality regulatory requirements, flood risk management, water supply reliability, and budgetary and workforce constraints dictate that a new way of stormwater management is needed to optimize business practices. By implementing core asset management processes, stormwater managers can gain knowledge of the assets owned, the remaining useful life to manage, the amount of investment required, and the business risk it faces.

Hydraulic Structures • Hydraulic structures are essential for water management. As challenges continue to arise from environmental issues, aging infrastructure, population growth, and climate change, engineering must evolve towards sustainability. Stantec's experts are designing structures to utilize water resources properly for drinking, agricultural, and industrial use to meet current and future economic, environmental, and social needs.

Our specialized team considers the behavior of water, fluid mechanics, thermodynamics, and weather forecasting to maximize efficient hydraulic structure design—honing in on the form and physical performance of the structures and how they are used.

Stantec extensive hydraulics experience encompasses pipe flow, dam and reservoir design, aqueducts, sewers, water and wastewater treatment, pumps, turbines, hydropower, computational fluid dynamics, flow measurement; river channel, canal, lake, estuaries, and watershed behavior; and erosion. Our modeling experience is a key tool for use in the planning, design, development, and implementation of a variety of infrastructure solutions – from levees and dams to canals, pump stations, detention impoundments and basins, as well as intake, flow diversion, and outlet structures.

Pump and Lift Stations • A major challenge for the planning and design of any new or expanded system is looking toward the future for build-out capacity expansion. Stantec not only uses our experience to implement proven designs, but we are pushing the envelope of what is possible—innovating so we can "storm and future-proof" these critical systems. Our integrated team of experts touch all design disciplines including architectural, electrical, instrumentation, mechanical, structural, and construction management.

Stantec is a world leader in hydraulic evaluations. Leveraging this experience, we conduct inspections and condition assessments to help our clients evaluate the reliability, lifecycle, efficiency, and capacity of all pumps and systems; structural and harmonics analysis; hydraulic analysis and CFD modeling; electrical design; liquid/vapor odor control; permitting, architectural, and construction support; address code compliance issues; and resolve operations and maintenance issues.

Permitting and Compliance • Building a strategy for successful permit applications is a team effort. We work with you to prepare permit applications and develop project schedules that keep projects moving forward. Our goal is to obtain essential information to meet regulatory requirements the first time around. Stantec has been supporting municipal and industrial clients for decades with their stormwater permitting and compliance needs. This includes General permits and Individual permits. Stantec stormwater experts are experienced in stormwater treatment design to meet compliance goals emerging from the increased regulatory oversight and focus on specific water body needs and TMDL watersheds. Our team can complete permit applications for state permits necessary for a project and assist in timely approvals and negotiation of permit conditions. Permitting is a time-consuming hurdle that every project needs to clear. Our team has the experience, knowledge, expertise, and relationships to ensure that your project gets off to a smooth, swift start.

Plan Development and BMP Design • From SWPPCP and Site-Specific sediment and erosion control plans to permanent natural treatment systems, Stantec has the planners, engineers, and scientists to prepare design and prepare a plan to suit your needs. For stormwater treatment and BMP design, Stantec's professionals will provide you with a cost effective, sustainable, and resilient solution to your stormwater quality needs. Depending on the need and application, our solutions range from conventional structural means to natural treatment systems.

Inspection and Monitoring & Use of Technology • Stantec Qualified SWPPP Practitioner (QSPs), Qualified SWPPP Developer (QSDs) and Qualified Industrial SWPPP Practitioner (QISPs) are fully qualified, trained, and experienced in navigating the SWPPP requirements through the SMARTS program. Additionally, we maintain a robust program for tracking inspections, inspection report preparation and submittal, annual report schedule and other interim reports and documents as required for the specific site/facility and per the permit requirements.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

We understand how to effectively make use of new technology to speed up reporting, provide more consistent compliance documents, and reduce overall long-term cost. At Stantec we have used numerous platforms such as our inhouse mTools™ program and external programs Depending on the clients' needs we can provide a recommendation on the best platform to use and how to implement the program. These programs can be customized and used for compliance inspections and reporting for SWPPPs, Hazardous Material Business Plans (HMBP), and Spill Prevention, Control, and Countermeasure (SPCC) Plans created and maintained on an annual basis.

Stantec recommends developing a collaborative environment that leverages mobile technologies to reduce the effort required to capture, generate, monitor, control and collaborate on all aspects of the environmental compliance projects. A cloud hosted framework would allow data/information to be accessed regardless of location and would enable stakeholders to work in parallel and be synchronized with field teams to complete deliverables and project requirements more quickly. Specifically:

- Inspection details, photos with GPS, site conditions and background information will be entered real time in the field.
- Information will be stored on the device including standards and practices to enable offline work and then be uploaded to a project collaboration site.
- Field records auto convert to report templates and prepopulate required reports and project performance dashboards.

Our approach consists of a web-based portal application that displays data dynamically, an enterprise SharePoint/SQL Server database and a workflow engine. The data on the server will be administered internally at Stantec and replicated to the client Portal. Stantec and the client will have access to the hosted portal site through secure a web browser.

Mobile Data Collection • Mobile application allows for pre-population of content to streamline assessments in the field, preconfigured dropdown values to aid in consistent inputs, touchscreen, and voice to text capabilities to improve user interface, GPS, photo attachments, and annotation interface.

Inspectors can use iPad or equivalent devices that connect to predefined forms built using SWPPP, HMBP, and/or SPCC Inspection templates provided by Soiland and/or Stantec as needed. AutoForm will function either on or offline, allowing inspectors to complete their work with or without Wi-Fi or cellular connectivity. Once an inspector returns to a Wi-Fi network, all data and corresponding photos are synchronized from the mobile database to an enterprise database (e.g.

SQL Server / SharePoint). Field staff will collect data during the day where it is stored and backed-up on the device. When they re-establish connectivity, (i.e. return to their office, hotel, basecamp or truck with boosted cellular coverage) they can upload the data they collected that day. If workers are connected continuously, the data can be streamed back to the database using the replication service at any time.

Training • Stantec provides onsite or web-based training that can be customized to fit any client need. Understanding your specific needs is key to developing a cost-effective strategy to maintain compliance. An overall review of your process, staffing, seasonal changes to workflow/staffing, and risk will be completed to determine the best solution and frequency to meet your needs. Stantec can provide face to face training at any frequency required or develop training modules and quizzes to enable in-house training by your staff that is supported with proper training documentation.

Stantec's Stormwater Practice Leads Ed Othmer and John Malueg have been providing site training for construction sites and industrial facilities since the Construction General Permit (CGP) and IGP were first adopted. Training is provided as needed for construction and industrial facilities. CGP training is provided at the beginning of construction activities. IGP training is typically provided for BMP inspection/implementation and stormwater monitoring.

Nature-based solutions • Nature-based solutions (NbS), sometimes referred to as engineering with nature, is a design approach that leverages the positive benefits of natural systems in conjunction with traditional engineering. Weaving natural features and processes into our design work increases long-term human, ecological, and infrastructure resilience to climate change and other environmental impacts.

In the face of warmer global temperatures, increased drought intensity, water quality degradation, biodiversity loss, more severe and frequent storms, flooding, wildfires, sea level rise, and coastal erosion, there's never been a more urgent time for NbS. Why? It plays a vital role in carbon sequestration by supporting the reduction of greenhouse gas emissions (GHG)—helping to mitigate climate change and generate a multiplicity of benefits.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Our holistic approach supports communities, industry, and our national security through the integration of NbS, resulting in social, economic, and environmental benefits. Whether the need is a bioswale to mitigate flooding, wetlands to filter storm and wastewater, or a coastal restoration that safeguards infrastructure, Stantec's NbS program has you covered. When it comes to achieving your environmental, social, and governance (ESG), UN Sustainable Development Goals (SDGs), and carbon net zero goals—we bring the needed technical expertise and experience working with communities for holistic, multi-benefit outcomes.

On the following pages, we have included SF330 Part II forms for Stantec Consulting Services Inc. and Stantec GS Inc. Honolulu offices as well as other offices that will serve the County of Hawai'i. Additional Part II forms can be provided upon request.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE	32. DATE
	June 30, 2025

33. NAME AND TITLE

Bob Armstrong, PE, Technical Advisor

PROFESSIONAL SERVICE PROVIDER QUALIFICATIONS	1. SERVICE CATEGORY OF INTEREST
	OS.1) Ecology, OS.3) Forestry (Watershed Management), OS.5) General Natural Resources Management and Biological Sciences Series, OS.9) Soil Conservation

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2016	YV48PGRUGZN1

2b. STREET	5. OWNERSHIP
1001 Bishop Street, Suite 1501	a. TYPE: **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Honolulu	HI	96813-3429	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Tina Moschetti - Vice President, Transportation	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(559) 492 4164	Tina.Moschetti@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	9
05	Archaeologist	691	0
06	Architect	1335	11
07	Biologist	421	3
08	CAD Technician	1218	1
12	Civil Engineer	4207	9
14	Computer Programmer	1375	1
15	Construction Inspector	350	1
16	Construction Manager	331	9
21	Electrical Engineer	1216	6
23	Environmental Engineer	854	1
24	Environmental Scientist	1764	2
27	Foundation/Geotechnical Engineer	686	0
37	Interior Designer	285	1
38	Land Surveyor	393	2
42	Mechanical Engineer	1360	0
47	Planner, Urban/Regional	956	3
48	Project Manager	2079	10
57	Structural Engineer	1289	2
58	Technician/Analyst	2017	4
	Other Employees	2600	0
	Total	**31644**	**75**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
A06	Airports; Terminals and Hangars; Freight Handling	10
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
C16	Construction Surveying	7
C18	Cost Est, Cost Eng and Analy; Para Costing; Frcst	6
E09	EIS, Assessments of Statements	10
E10	Environmental and Natural Resource Mapping	7
E11	Environmental Planning	10
G04	GIS Services; Devel, Analysis , and Data Collection	6
G05	Geospatial Data Conv: Scan, Digitizing, Comp	5
H01	Harbors; Jetties; Piers, Ship Terminal Facilities	9
H09	Hospital & Medical Facilities	10
I05	Interior Design; Space Planning	8
L02	Land Surveying	9
M05	Military Design Standards	8
R03	Railroad; Rapid Transit	10
R11	Rivers; Canals; Waterways; Flood Control	8
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
S11	Sustainable Design	6
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 27, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	UZJDKEMVLPN8

2b. STREET	5. OWNERSHIP
2999 Oak Road, Suite 800	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Walnut Creek	CA	94597-2054	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Trevor W. Macenski - Senior Principal	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(925) 296-2141	Trevor.Macenski@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Energy & Resources Inc.	2019	11-703-9392

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	28
05	Archaeologist	691	21
06	Architect	1335	2
07	Biologist	421	7
10	Chemical Engineer	455	2
12	Civil Engineer	4207	15
14	Computer Programmer	1375	3
15	Construction Inspector	350	1
16	Construction Manager	331	1
21	Electrical Engineer	1216	12
23	Environmental Engineer	854	5
24	Environmental Scientist	1764	11
27	Foundation/Geotechnical Engineer	686	2
29	GIS Specialist	306	7
30	Geologist	329	11
42	Mechanical Engineer	1360	9
47	Planner, Urban/Regional	956	9
48	Project Manager	2079	11
57	Structural Engineer	1289	4
58	Technician/Analyst	2017	1
	Other Employees	3406	4
	Total	**31644**	**166**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E03	Electrical Studies and Design	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H04	Heating; Ventilating; Air Conditioning	7
H07	Highways; Streets; Airfield Paving; Parking Lots	10
I01	Industrial Building; Manufacturing Plants	10
P02	Petroleum and Fuel (Storage and Distribution)	9
P04	Pipelines (Cross-Country – Liquid & Gas)	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P12	Power Generation, Transmission, Distribution	10
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
U03	Utilities (Gas and Steam)	8
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	GLQQSJ4WRL95

2b. STREET	5. OWNERSHIP
300 North Lake Avenue Suite 400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Pasadena	CA	91101-4169	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Laura Duarte - Office Manager	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(626) 568-6277	laura.duarte@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Energy & Resources Inc.; Stantec Consulting Services Inc. (Cardno, Inc. Glendale CA)	2016; 2022	08-009-4989; 08-029-8919

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	21
05	Archaeologist	691	8
06	Architect	1335	4
07	Biologist	421	3
08	CAD Technician	1218	4
10	Chemical Engineer	455	8
12	Civil Engineer	4207	27
14	Computer Programmer	1375	5
21	Electrical Engineer	1216	5
23	Environmental Engineer	854	8
24	Environmental Scientist	1764	9
27	Foundation/Geotechnical Engineer	686	0
30	Geologist	329	1
34	Hydrologist	251	2
42	Mechanical Engineer	1360	10
47	Planner, Urban/Regional	956	8
48	Project Manager	2079	7
57	Structural Engineer	1289	3
58	Technician/Analyst	2017	0
62	Water Resources Engineer	163	2
	Other Employees	2761	0
	Total	**31644**	**135**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	HAKDPJ5Q18X5

2b. STREET	5. OWNERSHIP
410 17th Street Suite 1400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Denver	CO	80202-4427	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Daniela Machado - Project Management & Commercial Leader, Water	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(303) 291-2274	daniela.machado@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno, Inc.; Stantec Consulting Services Inc. (Denver (S Colorado) CO; Stantec Consulting Services Inc. (Denver (18th St) CO; Stantec Consulting Services Inc. (Denver (Broadway) CO); Stantec Consulting Services Inc. (S Pennsylvania St) Denver, CO); Stantec Consulting Services Inc. (Englewood, CO)	1933; 2009; 2017; 2017; 2021; 2022	NPUPPC7VGKF7; TS2KYRHBKZA3; NUCNR8LGR2Z3; YKQBNN21M3M5; XY59YKA7BE83; NPUPPC7VGKF7

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	172
05	Archaeologist	691	9
06	Architect	1335	52
07	Biologist	421	1
08	CAD Technician	1218	8
10	Chemical Engineer	455	16
12	Civil Engineer	4207	77
14	Computer Programmer	1375	25
15	Construction Inspector	350	3
16	Construction Manager	331	5
21	Electrical Engineer	1216	8
23	Environmental Engineer	854	8
24	Environmental Scientist	1764	12
27	Foundation/Geotechnical Engineer	686	33
30	Geologist	329	7
42	Mechanical Engineer	1360	20
47	Planner, Urban/Regional	956	7
48	Project Manager	2079	33
57	Structural Engineer	1289	27
58	Technician/Analyst	2017	5
	Other Employees	2494	46
	Total	**31644**	**574**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE

June 30, 2025

c. NAME AND TITLE

Sheina Hughes - Vice President, US Mountain Regional Leader

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	ET2NUL57AEH9

2b. STREET	5. OWNERSHIP
601 SW Second Avenue Suite 1400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Portland	OR	97204-3128	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Luke De Hayr - Executive Vice President, Environmental Services	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(503) 419-2632	luke.dehayr@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno, Inc.; Stantec Consulting Services Inc. (Barnes Rd, Portland, OR); Stantec Consulting Services Inc. (Macadam Ave Portland OR)	1933; 2009; 2022	13-959-8010; 13-020-0319; VQEBAKYJ4VQ

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	26
05	Archaeologist	691	12
06	Architect	1335	5
07	Biologist	421	4
08	CAD Technician	1218	4
10	Chemical Engineer	455	3
12	Civil Engineer	4207	26
14	Computer Programmer	1375	12
15	Construction Inspector	350	9
16	Construction Manager	331	12
21	Electrical Engineer	1216	10
23	Environmental Engineer	854	4
24	Environmental Scientist	1764	7
27	Foundation/Geotechnical Engineer	686	4
38	Land Surveyor	393	1
42	Mechanical Engineer	1360	5
47	Planner, Urban/Regional	956	8
48	Project Manager	2079	22
57	Structural Engineer	1289	4
58	Technician/Analyst	2017	1
	Other Employees	2430	16
	Total	**31644**	**195**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1.	Less than $100,000	6.	$2 million to less than $5 million
2.	$100,000 to less than $250,000	7.	$5 million to less than $10 million
3.	$250,000 to less than $500,000	8.	$10 million to less than $25 million
4.	$500,000 to less than $1 million	9.	$25 million to less than $50 million
5.	$1 million to less than $2 million	10.	$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sheina Hughes - Vice President, US Mountain Regional Leader

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	T7A9LQQMSBE9

2b. STREET	5. OWNERSHIP
2890 East Cottonwood Parkway Suite 300	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Salt Lake City	UT	84121-7283	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Damon Brown - Senior Principal, Business Center Operations Leader	

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS	
(801) 743-4811	Damon.Brown@stantec.com	**Stantec Inc.**

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc. (W 200 S, SLC, UT); Stantec Consulting Services Inc. (S 700 E, SLC, UT); Stantec Consulting Services Inc. (Cardno, Inc. West Valley City UT)	2009; 2017; 2022	08-123-7600; 15-787-2641; 61-007-3608

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	21
05	Archaeologist	691	4
07	Biologist	421	3
08	CAD Technician	1218	2
10	Chemical Engineer	455	2
12	Civil Engineer	4207	11
14	Computer Programmer	1375	4
15	Construction Inspector	350	1
21	Electrical Engineer	1216	3
23	Environmental Engineer	854	5
24	Environmental Scientist	1764	12
27	Foundation/Geotechnical Engineer	686	1
29	GIS Specialist	306	2
30	Geologist	329	7
34	Hydrologist	251	7
42	Mechanical Engineer	1360	8
47	Planner, Urban/Regional	956	1
48	Project Manager	2079	26
57	Structural Engineer	1289	2
58	Technician/Analyst	2017	4
	Other Employees	3603	6
	Total	**31644**	**132**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
Sarah McIlroy	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Ltd./Stantec Experts-conseils ltée	2003	UZKEHN3JMV49

2b. STREET	5. OWNERSHIP
200-325 25th Street SE	a. TYPE: **Corporation**
2c. CITY: Calgary / 2d. STATE: AB / 2e. ZIP CODE: T2A 7H8	b. SMALL BUSINESS STATUS: **N/A**
6a. POINT OF CONTACT NAME AND TITLE: Anna Kozicky - Director of Business Development, Energy & Resources	7. NAME OF FIRM *(If block 2a is a branch office)*: **Stantec Inc.**
6b. TELEPHONE NUMBER: (403) 781-4134 / 6c. EMAIL ADDRESS: Anna.Kozicky@stantec.com	

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Ltd. (9th Ave., Calgary); Stantec Consulting Ltd. (Railway, Calgary)	2015; 2024	N/A; N/A

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	347
05	Archaeologist	691	34
06	Architect	1335	35
07	Biologist	421	23
08	CAD Technician	1218	55
10	Chemical Engineer	455	11
12	Civil Engineer	4207	97
14	Computer Programmer	1375	58
16	Construction Manager	331	30
21	Electrical Engineer	1216	46
23	Environmental Engineer	854	14
24	Environmental Scientist	1764	97
27	Foundation/Geotechnical Engineer	686	54
30	Geologist	329	17
38	Land Surveyor	393	24
42	Mechanical Engineer	1360	32
47	Planner, Urban/Regional	956	15
48	Project Manager	2079	74
57	Structural Engineer	1289	29
58	Technician/Analyst	2017	205
	Other Employees	2451	142
	Total	**31644**	**1439**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
B02	Bridges	10
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
D04	Design-Build; Preparation of RFPs	9
E02	Educational Facilities; Classrooms	10
E09	EIS, Assessments of Statements	10
E11	Environmental Planning	10
E12	Environmental Remediation	10
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H09	Hospital & Medical Facilities	10
H11	Housing (Residential, Multi-Family, Apts, Condos)	10
I01	Industrial Building; Manufacturing Plants	10
M06	Mining & Mineralogy	10
P04	Pipelines (Cross-Country – Liquid & Gas)	10
P12	Power Generation, Transmission, Distribution	10
R03	Railroad; Rapid Transit	10
S04	Sewage Collection, Treatment, and Disposal	10
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
T03	Traffic & Transportation Engineering	10
U02	Urban Renewals; Community Development	10
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: **June 30, 2025**

c. NAME AND TITLE: **Scott Argent - Vice President, Alberta North**

Water

County of Hawai'i

ARCHITECT-ENGINEER QUALIFICATIONS

PART I - SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

County of Hawai'i

2. PUBLIC NOTICE DATE	3. SERVICE CATEGORY
June 30, 2024	Water

B. CONTRACT ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Bob Armstrong, PE, Project Manager/Project Lead

5. NAME OF FIRM

Stantec Consulting Services Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
808-781-9545	N/A	bob.armstrong@stantec.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors)

	(check)			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUBCON-TRACTOR			
a.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	1001 Bishop Street, Suite 1501 Honolulu, HI 96813-6461	Water
b.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	2999 Oak Road, Suite 800 Walnut Creek CA 94597-2054	Water
c.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	300 North Lake Avenue, Suite 400 Pasadena CA 91101-4169	Water
d.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	410 17th Street Suite 1400 Denver CO 80202-4427	Water
e.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	601 SW Second Avenue Suite 1400 Portland OR 97204-3128	Water
f.	x			Stantec Consulting Services Inc. ☒ CHECK IF BRANCH OFFICE	2890 East Cottonwood Parkway Suite 300 Salt Lake City UT 84121-7283	Water
g.	x			Stantec Consulting Ltd. ☒ CHECK IF BRANCH OFFICE	25 Street SE Calgary AB T2A 7H	Water

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Bob Armstrong, PE	Water/Wastewater Lead & Contract Manager	39	12

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Civil Engineering	Professional Engineer #8682, HI

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Bob Armstrong has 37 years of diverse analytical, scientific, and environmental engineering experience. This includes wastewater transmission, pumping, and treatment systems' design and construction on both the liquids and solids streams. His experience also extends to team building; large, complex team management; and operations leadership. Bob has worked on the Hawaiian Islands since 1991.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Sand Island Wastewater Treatment Plant (SIWWTP) Secondary Treatment Phase 2 (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In a joint venture with R.M. Towill (RMTC), Bob currently manages Phase 2 of the expansion which will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. The project also includes major consideration for sea level rise and climate change resiliency **Size:** 90MGD • **Cost:** $1.5B • **Role**: RMTC/Stantec JV Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
SIWWTP Phase 1 Secondary Treatment Upgrades 3rd Party Review and Value Engineering Workshop (Honolulu, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: As a subconsultant to RMTC, Bob led the Stantec team in the detailed review of the design (by others) of Sand Island's Phase 1 Secondary Treatment Facilities Upgrades Project. The team also conducted a five-day Value Engineering (VE) workshop at the 60% design level. The Third-Party review involved close coordination across all disciplines within the R.M. Towill/Stantec team as well as interface with the lead design consultant and key City and County of Honolulu Water Engineering and Construction (WEC) and operations staff. Over 5,000 design items were addressed, many in a repetitive or iterative process, over the 30/60/90/100% review cycles, which generated over 3,000 review comments. VE produced 88 ideas for value enhancement, with an approximate value of $83M. The ideas carried forward by the designer resulted in an overall impact to the bottom line on the order of approximately $23M. The March 2020 through March 2021 SIWWTP Phase 1 Secondary Treatment Upgrades 3rd Party Review and Value Engineering Workshop effort provided a cohesive R.M. Towill/Stantec team to uniquely gain in-depth and detailed knowledge and understanding of the entire Sand Island Wastewater Treatment Plant and valuable insights into the EPA Consent Decree-related Phase 1 and Phase 2 secondary process upgrades. • **Size:** N/A • **Cost:** $1M • **Role:** Stantec Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: SIWWTP Plant Bioconversion Facility Capacity Upgrades (Honolulu, HI)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Bob serves as contract manager for planning and engineering design services in support of RMTC's subcontract to Synagro-WWT (Synagro) for Phase 1 biosolids system upgrades to SIWWTP on behalf of CCH. Upgrades to the 90 MGD SIWWTP include design for additional Bioconversion gas digesters, and ancillary systems and facilities, and generation of steam and power based on Combined Heat and Power (CHP) technology. The project schedule for planning and design is being expedited in order to coordinate construction activities with those associated with AECOM's Phase 1 – Secondary Treatment Upgrades Project. The Basis of Design (BOD) Report phase of the project is currently underway. • **Size:** N/A • **Cost:** $1M • **Role:** Contract Manager

d.

(1) TITLE AND LOCATION *(City and State)*: PAR 1304 - 2018 District-Wide Facility Plan (Denver, CO)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The 2018 Facility Plan establishes short-term and long-term project recommendations, process selection, and implementation schedules to meet the District's planning and regulatory drivers for the next 20 years. To address planning and regulatory and TBL drivers over the next 20 years, Stantec partnered with the District to identify short and long-term capital improvements with a focus on innovation, adaptation, and resilience. The projects included a complete assessment of the existing processes and overall planning drivers, development of alternative analysis, and integrated solutions, which were compiled and prioritized on a capital expenditure schedule. The District serves approximately 1.8 million people in the Denver metropolitan area by providing wastewater transmission and treatment services to 22 member agencies and 26 special connectors over a 715-square mile area. • **Size:** 715 square mile area • **Cost:** $3M • **Role:** Principal-in-Charge

e.

(1) TITLE AND LOCATION *(City and State)*: PAR 1280 Nuisance Struvite and Dewaterability Improvements (Denver, CO)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 | CONSTRUCTION *(If applicable)*: N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This $22M project included Centrisys MagPrex phosphorus recovery and struvite harvesting process, the largest in the world, including pilot studies, phosphorus mass balance modeling, full plant performance modeling (analysis of biological phosphorus removal coupled with P-recovery process on dewatering performance of digested sludges), technology selection for the ultimate system, including coordination with Metro's biosolids management program. • **Size:** 300 MGD • **Cost:** $22M • **Role:** Principal-in-Charge

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sheryl "Sherry" Campagna	Hawai'i-based Coordination Lead	29	2

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Biology	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Sherry serves as a senior environmental planner. Her clients have included the U.S. Army Corps, the U.S, Department of Navy, the U.S. Marines, the State of Hawaii, Maui County, Kauai County, Hawaii County, the City and County of Honolulu, utility companies, and transportation agencies. She has extensive knowledge of federal, state, and municipal environmental requirements and has successfully managed NEPA and HEPA projects, often with large technical teams located throughout the Pacific region and on the continental United States. Her technical background includes land planning, environmental compliance, environmental permitting, wetlands, stormwater, shorelines, wildlife conservation, water quality, resource conservation, waste management, transportation, Superfund and brownfield sites, UXOs, renewable energy, public engagement, agency coordination, and cultural resources. She is respected for her work as a team leader and contract manager and is known for her effective leadership of contentious environmental projects--particularly those with complex issues and cultural concerns.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lahaina Watershed Flood Management (Lahaina, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The Lahaina Watershed Flood Management Project requires the development of a Natural Resource Conservation Service (NRCS), National Environmental Policy Act (NEPA), and Hawai'i Environmental Policy Act (HEPA) compliant Supplemental Plan Environmental Document (ED) to evaluate watershed protection and management measures within the Lahaina Watershed. The proposed project is intended to mitigate for flooding and reduce the impacts of sedimentation in the nearshore marine environment. Sherry manages the Stantec team and subconsultants through the development of an environmental document for this watershed and flood protection project in Lahaina on the island of Maui. She also guides and supports the communications component of this project as public outreach, stakeholder engagement, and agency coordination are vital to the project's implementation. **Size:** 5,250 acres | **Cost:** $1.4M | **Role:** Project Planning Lead | **Dates Involved:** 2022 - Ongoing

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
HUD, HTF, HOME-ARP Funded "Hale O Pi'ikea" Affordable Housing Project; Part 58 Environmental Assessment (EA) Under NEPA and HEPA (Kihei, Maui, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Hale O Pi'ikea Affordable Housing Project is a 220-unit, three-phase development planned at the intersection of Pi'ikea Avenue and Liloa Drive in Kihei, Maui, Hawai'i. This project includes a Part 58 EA and supporting technical studies. The Part 58 EA would be prepared in accordance with NEPA and the U.S. Department of Housing and Urban Development (HUD) environmental regulations. The Project intends to serve individuals and families earning between 30% and 60% Area Median Income (AMI) and help address the critical need for additional affordable housing on Maui. The project is also one component of the larger Kihei Downtown Development, promoting mixed-use sustainable development in Kihei which aims to foster a closely-knit, live/work community environment. **Size:** 12.59 acres | **Role:** Environmental and Community Engagement Manager | **Cost:** $80k | **Dates Involved:** 2022 - Ongoing

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	Hawaii Youth Correctional Facility (HYCF) Campus Redevelopment Plan (Kailua, HI)	PROFESSIONAL SERVICES 2018	CONSTRUCTION *(If applicable)* N/A
c.	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm **Scope:** Eleven programs and their associated facilities were proposed for the facility which includes more than 20 buildings (including a Department of Education school) and covers over 400 forest and pasture acres owned by the State of Hawaii. Public and private partnerships were proposed to support the 11 programs designed to support and transition former wards back into the community. Cultural, historic, zoning, remediation, and utilities issues were identified as part of the redevelopment plan. As the environmental project manager, Sherry led the environmental, historic, permitting, and cultural components of this project. She supported the development of priorities for future development of the facility which includes historic buildings and cultural sites. Sherry was responsible for agency coordination, stakeholder engagement, and public outreach. Sherry also led a series of stakeholder and public charettes and authored the redevelopment planning report. **Role:** Project Manager | **Cost:** USD 120k | **Dates Involved:** 2016-2018		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Lisa Davidson	FEMA Coordination Lead	19	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Bellevue, Washington)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MA, Security Studies MUP, Land Use, Transportation, and Infrastructure Specialty BPA, Policy Pathway of Urban Studies AS, Arts and Sciences	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Lisa specializes in working with Federal programs, regulations, and statutes to distribute and oversee grant programs while supporting local, state, Federal, and tribal governments, and nonprofit organizations to successfully access and utilize these programs. Having recently joined Stantec as the firm's US Federal Programs Disaster Recovery Program Director, Lisa leverages her 7 years of direct experience across six FEMA Regions (2, 4, 6, 8, 9, and 10) where she delivered Individual Assistance (IA), Public Assistance (PA), and implementation of the National Disaster Recovery Framework (NDRF). As one of 10 Recovery Division Directors nationally, and a senior leader within FEMA's Recovery Directorate, she contributed to the development and implementation of FEMA's Recovery program policies. During her tenure at FEMA, Lisa supported the analysis of FEMA's staffing levels and positions needed in the IA and PA cadres to position the Agency to successfully delivery its Stafford Act programs. She has managed the training and development of over 100 staff members to prepare them for their IA and PA duties and served as the Disaster Recovery Manager on more than 150 disaster declarations. From her previous Federal positions with the U.S. Department of Housing & Urban Development, Lisa brings 6 years of experience managing housing and community development programs. During her time in the miliary, Lisa spent 4.5 years managing training, equipment maintenance, deployment readiness at a Marine Aircraft Group and supporting the management of personnel administration, transportation, and logistics for the Marine Corps Mobilization Command.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
FEMA Region 10, Recovery Division (Bothell, WA)	2023	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: Worked with FEMA HQ, a team of Recovery Division Directors, and SMEs to assess and identify regional staffing needs, resulting in doubling PA staff for mobilization and deployments. Augmented teams with reservists, IM-COREs, local hires, DHS Surge Capacity, technical assistance contractors, and other Federal agency staff to implement programs. Facilitated the COVID-19 Pandemic response, processing five disaster declarations concurrently for the R10's states and tribes, as well as transitioning workforce to remote operations. Balanced workloads across disasters, supported HQ initiatives, responded to emerging priorities, and monitored progress of all R10 recovery programs. Conducted regular coordination with team members, delegated responsibilities, reprioritized non-essential functions, and communicated with leadership to maintain regional steady state operations and readiness allowing for continuity in the delivery of FEMA's recovery programs. Managed and monitored deployments, funding, and timely program implementation in accordance with the Stafford Act, 44 CFR regulations, IAPPG and PAPPG, administrative requirements of 2 CFR 200, and other guidance. Responsible for appeals and audits, reports and recommendations, and other written correspondence required to document program compliance and progress. Provided status briefings of disaster operations and funding to FEMA leadership, elected officials, and White House representatives. **Role:** Recovery Division Director (2019-2023); Deputy Director (2018-2019)

b.

(1) TITLE AND LOCATION *(City and State)*: FEMA Region 10 Recovery Division (Bothell, WA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Responsible for managing the IA program staffing and readiness for R10. Coordinated staff deployment with regional and field leadership, other Regional Recovery Division Directors, and FEMA HQ to provide staffing augmentation. Deployments included the management and execution of FEMA's IA Direct Housing Program, overseeing and coordinating eligibility determinations, site inspections, IA TAC work orders and progress, licensing in and recertification of households, and other program implementation elements. **Role**: Acting IA Branch Chief and IA Program Specialist

c.

(1) TITLE AND LOCATION *(City and State)*: Office of Native American Programs, U.S. Department of Housing & Urban Development (HUD) (Seattle, WA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Led a team responsible for management of Indian Community Development Block Grant (CDBG) and Indian Housing Block Grant programs for 42 Federally recognized Tribes across Idaho, Oregon, and Washington. Oversaw concurrent annual awards consisting of multiyear grants of ~$60M annually, managing approximately 72 grants for $191M during this time. Monitored program performance and project status by conducting on-site observations, reviewing financial audits, annual reports, and grant expenditures for timely compliance with requirements. Project progress or grant compliance issues were immediately resolved through communication, written reports, or on-site technical assistance. Worked with specialists to draft and review written communications with recipients regarding program compliance and progress, reporting results to HUD HQ in the Performance Tracking Database. **Role:** Grants Evaluator Team Lead | **Dates Involved:** 2014-2016

d.

(1) TITLE AND LOCATION *(City and State)*: Office of Community Planning and Development, U.S. Department of Housing & Urban Development (HUD) (Seattle, WA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2014 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: Technical expert providing oversight and monitoring of grantees for HUD's Home Investment Partnerships (HOME), CDBG, and Continuum of Care (CoC) programs. Program management duties included grant applicant review and award, performance assessments, report review and analysis, and monitoring and corrective action for millions of dollars in grants annually. Implemented internal tracking mechanisms to monitor project progress and timely submission of reports to inform written reviews of compliance documentation of the recipient's performance and the government's oversight of the grant programs. **Role:** Community Planning and Development Representative | **Dates Involved:** 2011-2014

e.

(1) TITLE AND LOCATION *(City and State)*: Risk MAP Production and Technical Services (PTS) Contract, FEMA Zone 3 (Various Locations, USA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Responsible for programmatic oversight of 250+ contract staff and ~$10M of CPFF and FFP services. Involved with earned value and risk monitoring. Developed disaster framework for coordinating JV-wide services to HQ and Regions, offering FEMA additional technical capabilities and options for disaster planning, surge, and recovery. **Role:** Programmatic Manager | **Dates Involved:** 2023-Present

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Kimberly Pugel	Grant Application and Management Lead	9	3

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Bellevue, Washington)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
Ph. D, Civil Engineering MS, Civil Engineering BS, Environmental Engineering	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Kim is a utility management consultant that specializes in tracking and decoding funding for water and wastewater utilities throughout the Western US. With a PhD in Civil Engineering and Utility Management from the University of Colorado Boulder, her broad background uniquely weaves together engineering and policy -- from technical engineering for wastewater treatment, to water policy analysis for USAID and the UN. Since the passing of the Bipartisan Infrastructure Law and Inflation Reduction Act, Kim has closely followed funding flows and helped multiple agencies strategize and secure funding from this historic investment. Her recent funding strategies and applications have focused on drought resilience and hazard mitigation funding from FEMA, Bureau of Reclamation, EPA, and California state funding.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Maui DWS FEMA Coordination and Funding Strategy	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Working closely with Stantec's Disaster Recovery team, Kim is leading the funding team's effort to support the County of Maui Department of Water Supply (Maui DWS) in strategizing and securing FEMA and other federal funding in response to the Lahaina and Kula fires in August 2023. To be responsive to federal agency and disaster timelines, she and her team are working diligently to build a grants database and a prioritized project database synthesizing $1.2B in capital projects to build a more fire-resilient water system County-wide. Kim convenes the Interagency Recovery Coordination (IRC) group of federal agencies for monthly updates on the process, keeping future funding partners informed of upcoming projects and involving them in the funding matching process. **Role:** Funding Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Antelope Valley Funding Strategy (Palmdale, CA)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The Pure Water Antelope Valley program is a regional recycled water program to improve water supply resiliency and address an existing water shortage for a large, disadvantaged community of over 125,000 people in Los Angeles County. Kim leads the funding identification and application assistance for the Pure Water Antelope Valley as well as other priority projects from Palmdale Water District. For these projects, Kim identifies strategic funding matches from federal and state agencies, with consideration of impacts from the Infrastructure Investment and Jobs Act, Inflation Reduction Act, California AB 179, and other recent federal and state policy. She talks to funding administrators and coordinates application development to help secure the maximum funding possible. Kim coordinates across engineering teams and finance teams alike – including PWD's financial advisor and bond counsel. To date, PWD has been offered more than $20 million in grants and up to 49% of total project costs in low-interest loan financing that will save PWD ratepayers millions of dollars**. Role:** Funding Specialist

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Palmdale Water District Drought Mitigation Project - FEMA BRIC Application (Palmdale, CA)	**2024**	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Under Stantec's program management contract for the Pure Water Antelope Valley program, Kim and her team completed a FEMA Building Resilient Infrastructure and Communities (BRIC) grant program application. The team wove together a compelling narrative to maximize scoring criteria, compiled a robust set of supporting documentation, and completed a passing Benefit-Cost Analysis using water supply and

drought.gov data for the past 100 years. The application requesting $50,000,000 was submitted to CalOES in December 2023. **Role:** Funding Lead

d.

(1) TITLE AND LOCATION *(City and State)*: Water and Climate Resilience Funding Tracking (Various Locations, USA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Kimberly tracks water funding and policies throughout the West, keeping tabs on high-profile funding programs and policies such as the Environmental Protection Agency Clean Water and Drinking Water State Revolving Funds, Bureau of Reclamation WaterSMART funding programs, and the EPA Financial Capability Assessment Guidelines. She cultivates strategic and timely information by attending stakeholder meetings, reading fine print of funding notices, and talking with policymakers and program administrators. She has recently mapped out the $55 billion of water-related funding invested by the 2021 Bipartisan Infrastructure Law and the $95 billion of climate-related public funding programs from the 2022 Inflation Reduction Act. A focus of her analysis is understanding how these dollars will benefit disadvantaged populations, including the use of Technical Assistance programs. She currently provides direct advisory support to multiple agencies and municipalities across the Western U.S. Ongoing.

e.

(1) TITLE AND LOCATION *(City and State)*: Wastewater Treatment and Reclamation Field Technician (San Luis Obispo, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Scope: As a lab and field technician, Kimberly collected and analyzed gas and water samples and maintained six pilot-scale algae ponds and anaerobic digesters. She took over research program management responsibilities and led two projects on water reuse in compliance with CA Title 22 regulations. In this role she managed and analyzed large datasets related to water quality and treatment, as well as trained, managed, and mentored ten lab & field technicians. **Role:** Technician

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Charles O. Bromley	Desalination Technical Lead	45	37

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Las Vegas, Nevada)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS/BSc, Civil Engineering MS/MSc, Environmental Engineering	Professional Engineer #PE.56191, OH Professional Engineer #0402022667, VA Professional Engineer #PE042258R, PA Professional Engineer #13713, MD Professional Engineer #013205, NV Registered Civil Engineer #83820, CA Professional Engineer #46562, WA Professional Engineer #23710, NM Professional Engineer #49926, CO

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Charlie is a civil and environmental engineer offering over 40 years of experience with emphasis on the planning, design, and construction of municipal water facilities. He has served on numerous design teams in various roles for small and large-scale treatment facilities featuring conventional, direct filtration, low- and high-pressure membranes, advanced oxidation, desalination; and hybrid systems. Charlie has expertise with piloting; construction phase engineering; startup, commissioning and training; value engineering; master planning; and independent quality review. He has authored 22 publications with 20 podium presentations at industry conferences and webcasts on the subject of water treatment plant design and planning.

Board Certified Environmental Engineer, American Academy of Environmental Engineers and Scientists

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Bon Tempe and San Geronimo Water Treatment Plants Master Plan and Filter Rehabilitation (Corte Madera, CA)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The first of these two projects that Stantec completed for MMWD was a Master Plan to ensure reliable, cost-effective operation of the two drinking water treatment plants for the next 50+ years. The Master Plan, completed by the end of 2014, found that major seismic rehabilitation of filters and other structures is required to achieve code compliance and meet the District's reliability goal of producing water within 24 hours of a major earthquake. To address these issues, Stantec began the Filter Rehabilitation Project in 2015. Charlie served as a technical advisor for the master plan and for the subsequent detailed design project, which includes performing seismic/structural analysis, evaluating upgrade options, preparing cost-effective designs, managing bid documents, and providing construction support for the necessary improvements at both plants. Design work was completed and rehabilitation completed in 2018. **Role:** Technical Advisor

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Big Hole Water Treatment Plant Upgrade Project (Butte, MT)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Charlie was the technical advisor for residuals handling for the upgrades to the Big Hole WTP in Butte, Montana. The purpose of the project was to improve DBP precursor removal and make other general plant improvements. Based on results of jar testing and a subsequent three-month pilot test, the Division elected to abandon its existing contact adsorption clarifiers and proceed with retrofit of the plant to add enhanced coagulation facilities (sedimentation basins with lamella plate settlers), sludge thickening and mechanical dewatering. **Role:** Technical Advisor

c.

(1) TITLE AND LOCATION *(City and State)*: Lake Oswego-Tigard Water Treatment Plant (LO-T WTP) Expansion (Lake Oswego, OR)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2017 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Charlie served as project manager during the design phase for the City of Lake Oswego's WTP. The upgrade will more than double the capacity of the WTP from 16 to 38 MGD and includes such processes as high-rate ballasted flocculation, intermediate ozonation, deep-bed GAC filtration, and chlorine disinfection. The project was heavily impacted by neighborhood concerns, requiring numerous meetings and agreements which affect design and siting. A construction sequencing plan was developed to minimize plant shut downs and associated construction activities. **Role:** Project Manager | **Cost:** USD $68M

d.

(1) TITLE AND LOCATION *(City and State)*: Virgin and Muddy River Treatment Utilizing High Pressure Membranes, Southern Nevada Water Authority (Las Vegas, NV)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Beginning in 2005, Charlie served as project engineer to evaluate the potential for treating and serving water obtained from two desert streams with headwaters located in central Nevada and southern Utah, on behalf of the Southern Nevada Water Authority. Source waters are very brackish with exceptionally high concentrations of inorganic constituents. Based on detailed water quality evaluations, a 70-MGD treatment scheme was selected, comprised of lime and soda ash pre-treatment softening, followed by microfiltration, reverse osmosis, ion exchange for boron reduction, ozonation, and granular media filtration. Computerized process models were developed to evaluate various types of high-pressure membranes and pre-treatment systems: high pressure and low pressure membranes proved to be the primary unit processes to be selected. Recommendations were included for removal of high levels of exotic dissolved contaminants such as boron, silica, manganese, barium, and radioactive particles. Treatment technology advisory panels were convened to review and validate recommendations, including expertise from academia and across the USA. **Role:** Project Engineer

e.

(1) TITLE AND LOCATION *(City and State)*: Strategic Renewable Water Implementation Program - Phase 2 (Castle Pines, CO)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Scope: Stantec was selected by Castle Pines North Metro District to prepare a Strategic Renewable Water Implementation Plan. The objective of the plan is to present an organized, defensible approach for reducing the District's dependence on non-renewable groundwater. Stantec developed a large number of alternatives involving existing District water rights, existing regional conveyance and storage infrastructure (e.g., Reuter Hess Reservoir, Chatfield Reservoir), and proposed facilities (e.g., Plum Creek Reservoir, lower South Platte Basin storage). Previously developed water rights models are being converted to a modeling system to simulate the ability of various combinations of water rights and infrastructure components to meet build-out demands during a critical drought period. Alternatives will be compared based on their cost, water supply yield, practicality, and constructability. The result will be a combination of new surface water projects which, when combined with existing groundwater resources, will be capable of meeting all future demands with a minimal reliance on non-renewable groundwater. Charlie will be responsible for detailed quality reviews of all technical aspects of project deliverables, including calculation assumptions and methodologies, ensuring compliance with internal and client quality standards, and following best practice design and planning recommendations.

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Rick Cowles	Aquifer Storage and Recovery Expert	33	8

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Sarasota, Florida)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Hydrogeology & Geophysics BS, Geology, Mount Union College	Professional Geologist #2656, FL

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Rick is a Senior Hydrogeologist with over 30 years of experience managing and delivering groundwater supply and environmental projects. He is deeply familiar with the regulatory framework related to environmental and construction issues, including the development of permits and plans for submittal to regulatory agencies. In addition, Rick has designed and installed numerous production wells for drinking water supply, groundwater recovery, water quality issues, and gradient control. He has conducted aquifer testing to evaluate well efficiency and well field yield as well as to identify recovery well capture zones and to determine aquifer coefficients. He has utilized electromagnetic conductance and resistivity geophysical methods to identify new well field sites and to determine the limits of waste placement and areas of leachate generation and migration at landfills.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Biscayne Aquifer Test Production Well. FPL/NextEra (Homestead, FL)	2019	2018

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Client Manager and lead for the development of 4,600 gpm test production well design, construction oversight, and conducting of a 5-day constant rate pumping test. The results of the pumping test are being used in a three-dimensional groundwater model. This is a turnkey project that includes all aspects of the production well design and construction, testing and analysis of aquifer test data.
Role: Client Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Aquifer Storage and Recovery (ASR) Well Program, South Florida Water Management District (Okeechobee, FL)	Ongoing	Ongoing

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Client Manager and lead for the design of the wellhead and piping associated with an Upper Floridan Aquifer Flex Well at Turkey Point Nuclear Power Plant. The well is expected to be approximately 1300 feet deep and produces approximately 3 MGD of brackish groundwater
Role: Client Manager

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Causes of Hypersalinity, FPL/NextEra (Homestead, FL)	2019	2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Client Manager and lead for the identification of causes that resulted in hyper salinity and an algae bloom in the cooling canal system (CCS) at the Turkey Point facility. This investigation determined that sediment accumulation in the CCS had restricted the exchange of groundwater with the surface water system. The algae bloom was due to an increase in nutrients in the CCS and the die-off of the aquatic plants. Once the algae bloom became significant, an algal mat formed on the bottom of the CCS further reducing the exchange of water with the underlying aquifer system. As a result, salinity levels in the CCS approached three-time sea water. **Role:** Client Manager

d.

(1) TITLE AND LOCATION *(City and State)*: Replacement Production Wells, Design, Construction, and Testing (City of Sunrise, Florida)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 | CONSTRUCTION (*If applicable*): 2019

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Project Technical Lead for the design of five replacement Biscayne Aquifer production wells. Each well will produce approximately 800 gpm with minimal drawdown. Test borings were installed at each well location to confirm assumed hydrogeologic conditions, and two 24-hour constant rate tests were conducted to determine aquifer coefficients and aid in the siting of additional wells.
Role: Project Technical Lead

e.

(1) TITLE AND LOCATION *(City and State)*: Biscayne Aquifer Replacement Production Wells (Sunrise, FL)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Rick served as Project Manager for the design of eight replacement Biscayne Aquifer production wells. Each well will produce approximately 2 MGD with minimal drawdown. Test borings were installed at each well location to confirm assumed hydrogeologic conditions, and two 24-hour constant rate tests were conducted to determine aquifer coefficients and aid in the siting of additional wells.
Role: Project Manager

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Neil A. Johnson	Aquifer Storage and Recovery Technical Lead	33	25

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (West Palm Beach, Florida)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Geology BS, Geology	Professional Geologist #2052, FL

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Neil has more than 30 years combined experience as a project manager, hydrogeologist, geologist, driller, geotechnical inspector, and environmental technician. His experience includes staff management, construction oversight, testing, and rehabilitation of production wells, 100+ Underground Injection Well (UIC) Class I Injection well systems and UIC Class V Aquifer Storage and Recovery (ASR) wells; characterization of Coastal Plain sediments; development of drilling and sampling plans; monitor well installation; interpretation of hydrogeologic, geophysical, and geochemical data; quality control of construction methods and materials; regulatory coordination; and report preparation. Neil has performed permitting, design, construction supervision, testing, and inspection of ASR and Class I injection wells throughout Florida. This incorporates mud rotary and reverse air drilling, well construction, casing installation and pressure testing, supervising cementing, monitoring coring operations, geologic and hydrologic sampling, lithologic descriptions, conducting packer tests, mechanical integrity testing, and geophysical logging.

Certifications: Certified Contractor, 1509641, State of Florida, Orlando, Florida
Water Well Contractor, 11284, State of Florida, Orlando, Florida

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Cocoa Beach ASR Well Permitting, Design, and Construction Management (Cocoa Beach, FL)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Neil prepared application materials and supporting technical evaluations to apply for a Class V Group 9 Reclaimed ASR System. The scope included an area of review study, a regional hydrogeological evaluation, ASR well design, and permit application materials to construct a Class V ASR well system. The test production well was designed to inject up to 2 mgd of reclaimed water into a non-underground source of drinking water aquifer (i.e., >10,000 mg/L TDS). Neil prepared the permit application materials and design and bidding documents, provided engineering services during construction, progress reporting, construction management, and regulatory coordination with the FDEP throughout testing. The project is substantially complete with cycle testing scheduled to begin within the next few months.
Role: Project Technical Lead/Project Manager

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
General Engineering Services (North Miami Beach, FL)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Neil served as the project manager for the well pump replacement evaluation at the North Miami Beach Floridan Well as well as for the construction permit modification, operational testing, and operational permit for the Norwood-Oeffler Concentrate Injection Well System. He also performed value engineering during the design and permitting of the injection well, Floridan Aquifer production wells, and Biscayne Aquifer production wells. **Role**: Project Manager

c.

(1) TITLE AND LOCATION *(City and State)*: Central District Wastewater Treatment Plant Industrial Injection Wells and Pump Station (Miami/Virginia Key, FL)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Neil served as the QA/QC manager and later as project manager for the design, permitting, and construction of the Central District WWTP Class I Non-hazardous Industrial Injection Well System. The project included a 10,000-foot- deep exploratory test hole to investigate alternative disposal options below the lower Floridan aquifer system. The well was completed with a 36-inch-diameter final casing set to 2,780 feet bls with a 24-inch-diameter FRP tubing cemented in place. The system is capable of injecting up to 19.9 MGD of plant process flows, secondary treated effluent, and leachate from the adjacent closed landfill from each well. Neil is currently serving as the project manager for the operational testing of the injection well system. **Role:** QA/QC Manager

d.

(1) TITLE AND LOCATION *(City and State)*: Manatee County Potable Water ASR (Manatee County, FL)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Mr. Johnson was responsible for the hydrogeologic services performed during the construction and testing of a reclaimed ASR system and ASR test well for Manatee County. The project included supervising drilling, evaluating lithology, analyzing packer test data, conducting aquifer performance tests, and coordination with FDEP and the County. **Role:** Lead Hydrogeologist

e.

(1) TITLE AND LOCATION *(City and State)*: Broward County 1A Water Treatment Plant (Broward County, FL)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Neil was responsible for the preliminary design of two Floridan Aquifer Test Production Wells and a Class I Injection Well System. The first phase of this project included a well-siting study, hydrogeologic characterization, permitting review, and Basis of Design Report. The project will ultimately provide raw water and disposal capabilities for a 7 MGD ROWTP Expansion of the existing Lime Softening Water Treatment Plant. **Role:** Project Hydrogeologist | Dates Involved: 2011-2015

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
David Pernitsky	Water System Planning and Design Lead	33	8

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Pasadena, California)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
PhD, Environmental Engineering MS, Environmental Engineering BS, Civil Engineering	Professional Engineer #95428, CA Professional Engineer #52725, Association of Professional Engineers and Geoscientists of Alberta Professional Engineer #16215, Association of Professional Engineers and Geoscientists of Saskatchewan Professional Engineer #28823, NM

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

David is a subject matter expert and lead water treatment resource for Stantec's municipal and industrial water treatment projects. He has 30 years of environmental engineering experience in drinking water treatment, groundwater remediation, wastewater reuse, wastewater treatment, and water resource management. David has led many projects involving state-of-the-art technological solutions such as dissolved air flotation (DAF), ozonation, granular activated carbon (GAC), ion exchange, membrane filtration, reverse osmosis (RO), and high rate granular media filtration systems.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*: San Fernando Groundwater Treatment Project (Los Angeles, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Technical Advisor for the design build of two WTP facilities of approximately 15,000 gpm each to remove VOCs (1,4-dioxane, PCE, TCE) from contaminated aquifers to meet drinking water regulations. Treatment train included a UV/H2O2 Advanced Oxidation Process (AOP) followed by GAC adsorption, followed by sodium hypochlorite, aqua-ammonia, and fluoride addition. The low pressure high output Trojan UVFlex UV/AOP system was selected for this project.
Role: Technical Advisor | Dates Involved: 2019-present

b.

(1) TITLE AND LOCATION *(City and State)*: St. Paul Regional Water System Improvements (Saint Paul, MN)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: ; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

As Owners Representative, David provided process technical review of the designer's technical deliverables for the Progressive Design Build of improvements to the McCarrons WTP. Project scope included the addition of four new solids contact clarifiers, each with a capacity of 95 ML/d, new lime slakers, and the addition of ozonation for taste and odor control.
Role: Process Technical Lead | **Cost**: USD $180M

c.

(1) TITLE AND LOCATION *(City and State)*: Water Treatment Facility Evaluation (Lompoc, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2023; CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Capacity evaluation and expansion plan to increase production of a 5 mgd groundwater softening plant to 10 mgd. The existing plant consists of conventional lime softening followed by recarbonation and diatomaceous earth (DE) filters. Conceptual design options were developed to expand softening capacity by adding a third conventional lime clarifier, a pellet softener, or a nanofiltration-based membrane softening process. A conceptual design was also developed to replace the DE filters with either polymeric or ceramic ultrafiltration membranes.
Cost: USD $95K

d.

(1) TITLE AND LOCATION *(City and State)*: Lynch Canyon Facility Direct Potable Reuse Study (San Ardo, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2020 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Technical Advisor for the preliminary engineering evaluation of a potential water treatment strategy to treat oilfield produced water for potable uses in a water-scarce area. The study included the evaluation of the produced water quality, review of applicable California water recycling criteria, and the conceptual design of a WTP suitable to ensure a reliable, robust, and resilient system capable of ensuring public health protection. The conceptual design of the treatment process included ceramic ultrafiltration, ion exchange, reverse osmosis, UV/AOP, GAC and chlorine addition. It was noted that extensive piloting and verification would be needed prior to full-scale implementation.
Role: Technical Advisor

e.

(1) TITLE AND LOCATION *(City and State)*: Water Long Range Plan Update (Calgary, Alberta, Canada)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

This project updated the City's Water Long Range Plan with the intent to harmonize previous planning work done for water supply, treatment, and transmission infrastructure. The project reviewed previous engineering and planning reports for each infrastructure area, identified any internal inconsistencies, compared the City's planning approach to those of other municipalities, and developed a roadmap for future water infrastructure planning and development.
Role: Project Technical Lead

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Nelson	Kauai-based Environmental Lead	14	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Honolulu, Hawaii)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Oceanography & Native American Tribal Law	N/A

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

John has spent 10 years with Native American Tribes, Local Districts, and Federal Government as an environmental director, physical scientist, project manager, field biologist, and NEPA specialist. He has led marine projects and managed development of scientific assessments, monitoring restoration and/or management plans, field programs, and permit application reports in the United States. John has led multiple interdisciplinary teams working primarily on natural resource and conservation-related plans and projects. While conservation projects are his primary passion, he has managed several plans and Environmental Assessment (EA), Environmental Impact Statement (EIS), and Phase I& II efforts for governmental entities and organizations.

Certifications and Training: Emergency Medical Technician, First Aid, and First Responder, National Operator of Uninspected Passenger Vessel, Certified small boat operator, Boating Safety U.S. Foundation & United States Coast Guard, Section 106 Cultural Resources Consultant, Section 106 of the National Historic Preservation Act

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Lahaina Watershed Flood Management Project (Lahaina, HI)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

John is assisting the Lahaina Watershed Environmental Assessment, which evaluates the impact of proposed flood control measures and related projects within the Lahaina Watershed in Maui, Hawaii. The assessment aims to address issues such as flooding, sedimentation, and water quality, while also considering the preservation of natural and cultural resources. John is helping with the assessment that identifies the need for improved infrastructure to manage stormwater and prevent damage to residential and commercial properties. John is assisting the restoration of native vegetation in riparian areas to enhance ecological function and water quality. He is working to address the implementation of erosion control measures to reduce sedimentation in waterways. John is helping the County of Maui and NRCS in strategies to minimize negative impacts include timing construction activities to avoid critical periods for wildlife, using best management practices to control erosion, and involving the community in restoration projects. He is also involved with the assessment emphasizes the importance of preserving cultural and historical sites within the watershed. John has in-depth engagement with local communities, including Native Hawaiian groups, and is a key component of the planning process to ensure that traditional knowledge and values are respected. The assessment process includes public meetings, stakeholder consultations, and opportunities for community input to ensure that the project reflects local needs and priorities.

b.

(1) TITLE AND LOCATION *(City and State)*
Kekaha Brownfield Community Engagement (Kekaha, HI)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES:
CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

John is assisting the Kekaha EPA Brownfield community engagement initiative, which focuses on involving local residents and stakeholders in the redevelopment of brownfield sites in Kekaha, Hawaii. Brownfields are properties where the presence or potential presence of hazardous substances, pollutants, or contaminants may complicate their expansion, redevelopment, or reuse. The EPA's initiative aims to address environmental, health, and economic concerns associated with these sites. John is assisting key components of the project engagement which include community outreach and Education: Informing residents about the brownfield sites, potential risks, and the benefits of redevelopment. This includes public meetings, informational sessions, and distributing educational materials. Stakeholder Involvement, which is engaging local businesses, community organizations, and government entities in planning and decision-making processes. This ensures that redevelopment plans align with community needs and aspirations. He studies, researches, and conducts environmental assessments to identify contamination levels and developing plans for site remediation. This may involve soil testing, removal of hazardous materials, and long-term monitoring to ensure safety. He aims to promote the redevelopment of brownfield sites to create job opportunities, stimulate local economies, and improve property values.

c.

(1) TITLE AND LOCATION *(City and State)*
Brawley Wash Watershed Plan and Environmental Assessment (Arizona, USA)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES:
CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

John is assisting the Pima County Brawley Wash Watershed Environmental Assessment, which evaluates the potential environmental impacts of various projects and initiatives aimed at managing water resources within the Brawley Wash Watershed in Pima County, Arizona. This assessment is conducted under the guidelines of the National Environmental Policy Act (NEPA) and includes a detailed analysis of the current environmental conditions, potential impacts of proposed actions, and measures to mitigate adverse effects. The primary purpose of the project is to address flooding, erosion, and sedimentation issues in the Brawley Wash Watershed. The need for the assessment arises from the necessity to improve water management, enhance public safety, and protect infrastructure and natural resources. John is helping with the assessment, which evaluates multiple alternatives, including no-action alternative.

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Malueg, PE	Resilient Infrastructure Lead	40	25

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Winston-Salem, NC)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
BS, Water Biology BS, Civil and Environmental Engineering	Professional Engineer (Civil) #15642, KY

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: Water Environment Federation, American Public Works Association, American Society of Civil Engineers

1. 19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Blue and Green Corridors Project (New Orleans, LA)	2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Funding support, planning and design of blue-green corridors to mitigate multi-hazard (flood and subsidence). Role included assisting in the HUD National Disaster Resilience Competition to secure nearly $140M in grant funding. Role included original visioning and selection of mitigation best management practices as well as facilitating the selection of adaptation monitoring criteria. • **Size:** N/A • **Cost:** $4.1M (design), $38M (construction) • **Role:** Resilience QA/QC

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Great Lakes St. Lawrence Cities Initiative Coastal Resilience Initiative (Lenox, IL)	2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Role includes identifying coastal vulnerabilities and risks including risks associated with climate change, identifying and screen mitigation options, developing conceptual designs and capturing findings within Project Implementation Frameworks in support of soliciting and securing federal funding. Effort is being funded by a series of special interest and federal (NFWF) grants, with a value to date exceeding $2.5M. Analysis to date has been limited to the states of Wisconsin, Illinois, and Michigan. Future scope to include coastal analysis in Ohio, Pennsylvania, New York, and Minnesota. • **Size:** N/A • **Cost:** $2.5M • **Role:** Initiative Advisor - Resilience

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
100 Resilient Cities Ala Wai Canal Flood Mitigation Analysis (Honolulu, HI)	2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: John provided coastal assessments, as well as watershed flood risk including schematic design of flood mitigation best management practices integrated into municipal golf course. Findings and analysis were in support of the city negotiating project partnership with USACE. • **Size:** N/A • **Cost:** $100M+ (construction) • **Role:** Technical SME

d.	(1) TITLE AND LOCATION *(City and State)* Tottenville Shoreline Protection Project (Staten Island, NY)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If* applicable*)* Bid ~ 2023
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Planning and design of multi-layers of resilience shoreline community protection project. The project integrated offshore living breakwaters, a network of natural and reinforced dunes, restoration of coastal wetland and wooded areas within a public beach/park environment. Role included assisting in securing nearly $20M in FEMA BRIC grant funding. • **Size:** 526 acres • **Cost:** $32M (construction) • **Role:** Economic Analyst		
e.	(1) TITLE AND LOCATION *(City and State)* Detroit Area Down River Community Conference Coastal Resilience Study (Detroit, MI)	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2023	CONSTRUCTION *(If* applicable*)* N/A
	(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm **Scope:** Role included facilitating community stakeholders, identifying vulnerabilities and risks as well as correct actions to advance to schematic design. Stakeholders included State, county, and multi-cities as well as utility and environmental community representatives. Study leverages findings of recent studies by the USACE. • **Size:** Detroit • **Cost:** N/A • **Role:** Stakeholder Outreach		

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Adam Butler	Asset Management Lead	17	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Walnut Creek, California)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MBA BS, Civil and Environmental Engineering	Professional Engineer #86769, CA Professional Engineer #51153, MA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Adam Butler is a civil engineer with 15 years of experience in asset management, condition assessment, design, and construction of water and sewer infrastructure and facilities. Most recently, Adam was the Solutions and Implementation Manager at MaintainX for critical operation and maintenance clients. As part of his accomplished career, Adam focused his MBA studies in finance and statistical analysis, which has allowed him to breakdown risks for clients to help prioritize competing demands. This approach has helped fast-track modified maintenance strategies and CIP project solutions into construction.

Construction Safety & Health, OSHA

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
WWTF Major Equipment and Infrastructure Study (Santa Cruz, CA)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Adam was the project manager and asset management lead for a facility-wide condition assessment of over 2,000 pieces of equipment to prioritize the facility's repair and replacement needs for the next 15+ years. These priorities were based on remaining useful life estimates, replacement cost estimates, and a risk analysis aimed at meeting the facility's desired level of service (LOS) goals. Adam led the project team in developing an Excel-based asset registry from the WWTF's existing CMMS and supplemented this database with an additional 400 valuable identified during condition assessments. This Excel tool met staff's requests and facilitated knowledge collaboration across departments. The results of this study helped plan budgets and capital projects in time for the City's 2021 fiscal year to optimize facility operations and efficiency with recommendations such as a facility-wide electric system reconfiguration.

Role: Project Manager & Asset Management Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Resource Recovery Facility Condition Assessment (Antioch, CA)		

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Adam was the asset management lead for analyzing the District's critical infrastructure, including: gravity sewer manholes, pipelines, force mains, and WWTF pipelines. These efforts led to risk estimates for prioritized actions based on all known data, which were then calibrated based on a sample of inspection reports to adjust risk parameters. Efforts on this project also included collecting condition data on sewer manholes and pipelines on an expedited schedule to satisfy regulatory requirements, which was fed into the dynamic asset registries. Mr. Butler also led the planning and coordination of the District's first and successful inspection of its WWTF Outfall pipeline, which was presented at the 2019 CWEA Annual Conference.

Role: Asset Management Lead

c.

(1) TITLE AND LOCATION *(City and State)*: Computerized Maintenance Management System (CMMS)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Adam directed the client solutions and implementation teams for two years and established processes and standards for the first 1,000 customers seeking professional services. This resulted in over 75% of customers being fully implemented within three weeks. Clients included Fortune 500 corporations running critical equipment and operations. As part of these services, Adam led the workflow mapping, custom configurations, change management, and integrations with enterprise software and IoT sensors to automate and streamline customers' business processes and performance. **Role**: Solutions and Implementation Manager

d.

(1) TITLE AND LOCATION *(City and State)*: Integrated Wastewater Master Plan (San Rafael, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

As Project Manager, Adam helped lead District staff through a five-day business risk and vulnerability assessment (BRVA) workshop to prioritize risks across the WWTP, collection system, and recycled water facilities. The results provided a single risk matrix for use across the enterprise and identified single points of failures. Adam oversaw staff and subconsultants across geographies to maintain the District's goals and schedule using a phased approach across several fiscal years to identify urgent and long-term capital improvement projects. Adam launched the 2nd phase of the three-phased approach to validate and calibrate risk estimates from Phase 1 before completing the master plan in Phase 3. **Role:** Project Manager

e.

(1) TITLE AND LOCATION *(City and State)*: Combined Sewer System Improvement Program (Lawrence, MA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☐ Check if project performed with current firm

Mr. Butler was the lead engineer and program designer of a system-wide data collection processes to identify and remove combined sewer overflows (CSOs) discharging to the Merrimack River. Adam designed a criticality assessment and optimized construction schedules with other City infrastructure projects to minimize disturbances and control costs. An extensive GIS MDB was used to manage and prioritize the City's combined sewer watersheds and to coordinate with the dozens of contractors working simultaneously throughout the City. **Role:** Lead Engineer & Program Designer

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Enli Li	Honolulu-based Project Manager	13	2

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Honolulu, Hawaii)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
BS, Civil Engineering	Professional Engineer #PE-18288, HI

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Enli is a professional engineer with 11 years of experience working for the Honolulu Authority for Rapid Transportation in the over $10 billion Honolulu Rail Transit Project in Honolulu, Hawaii. She is experienced in the various aspects of project delivery, including development of technical and contractual procurement documents for various projects to managing and administrating contracts. Enli's responsibilities have included ensuring contract compliance, interfacing with various stakeholders, preparing change order documents, and reviewing technical deliverables.

Training: 132070 Drilled Shaft Inspector Course, FHWA NHI

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Phase 2 Expansion and Organic Waste Sustainability Plan (Honolulu, HI)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Enli is project engineer in a joint venture team between Stantec and RM Towill to provide planning, design, and construction services for the Phase 2 Expansion of the Sand Island Wastewater Treatment Plant (WWTP). The facility currently provides advanced primary treatment and is constructing Phase 1 of an expansion to upgrade the facility to meet full secondary treatment standards. Phase 1 expansion will provide 20 MGD of secondary treatment capacity, and Phase 2 will provide secondary treatment for the remaining 90 MGD of capacity. The project also includes preparing an Organic Waste Sustainability Plan identifying potential sources of organic material for co-digestion, assessing markets for residual products (biosolids and biogas), and evaluating alternatives for organics management, co-digestion, and energy recovery at the Sand Island WWTP.

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Honolulu Authority for Rapid Transportation (Honolulu, HI)	2023	2023

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

The project is a mostly elevated and automated fixed-guideway light rail system along O'ahu' s south shore connecting East Kapolei in West Oahu to Honolulu's dense urban core in Civil Center. The alignment includes 18.9 miles with 19 stations and features platform screen gates and driverless trains. Enli was responsible for providing design and technical support for the design and construction team including change management, preparing technical procurement documents, reviewing technical drawings and reports, coordinating with all stakeholders (state, utility companies, consultants, subconsultants). She was also responsible for administering the 138kV relocation project along Kamehameha Highway to ensure that the scope, schedule, and budget of the contract were met.

Role: Project Manager, Civil Engineer | **Cost**: USD $10B

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Christina Hurley, AICP	Senior Hazard Mitigation Planner	12	7

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Raleigh, NC)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
Master of City and Regional Planning BA, Environmental Studies, Environment, and Infrastructure	Certified Planner #030812, American Institute of Certified Planners (AICP)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certifications: Utility Risk and Resilience Certification Program, American Water Works Association; NCI Charrette System Certificate Training, National Charrette Institute
Memberships: American Planning Association
Awards: 2014 Carolina Global Initiative Award, New Zealand, Modeling and Mapping Climate Change Risk and Adaptation Measures

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu Climate Change Design Guidelines (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina is supporting the development of the City and County of Honolulu (CCH)'s first iteration of climate change design guidelines. The guidelines, which will apply to CCH capital projects, include a report on climate hazard impacts and best available climate data, a climate risk exposure screening tool, and guidelines to provide design adjustments for enhancing resilience (including a design checklist). Christina's role on the project is to bring an understanding of climate hazard impacts to specific types of community infrastructure to inform deliverables. **Size:** County-wide • **Cost:** $418K • **Role:** Climate Adaptation Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui County Hazard Mitigation Plan Update (Maui, HI)	2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Christina led the FEMA-approved hazard mitigation plan's risk and vulnerability assessment component. Christina profiled each identified hazard, to include a description of the hazard, previous occurrences and impacts, hazard probability, and hazard severity. Christina used ArcGIS to assess vulnerability of structures, critical facilities, transportation infrastructure, and cultural resources to certain hazards, and included an assessment of hazard-specific impacts on socially vulnerable populations. Among other hazards, this risk assessment assessed coastal erosion, storm surge, and coastal flooding as profiled hazards, and emphasized the relationship between coastal erosion and sea level rise citing peer-reviewed research and available climate data. Further, Christina developed the risk and vulnerability assessment to maintain the county's current Community Rating System (CRS) status. • **Size:** County-wide • **Cost:** $54K • **Role:** Risk and Resilience Assessment Lead

c.

(1) TITLE AND LOCATION *(City and State)*

Maui Department of Water Supply America's Water Infrastructure Act Compliance, Risk and Resilience Assessment (RRA) (Maui, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2020	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Christina served as a primary risk assessment specialist to complete the utility's RRA, which was developed in accordance with the America's Water Infrastructure Act requirements and the American Water Works Association J-100 Standard. Christina helped identify DWS critical assets and potential threats, and used available tools, such as the Program to Assist Risk and Resilience Examination (PARRE) and ArcGIS, to calculate estimated risk to water supply assets from natural hazards and human-cause threats. Christina used these tools to develop a utility risk index for the water system, as well as to assess existing and potential risk-reduction countermeasures. Further, Christina used the results of the RRA to recommend resilience strategies to the utility. The RRA assessed current and future threats with consideration to future climate. • **Size:** County-wide • **Cost:** $177K • **Role:** Risk and Resilience Assessment Specialist

d.

(1) TITLE AND LOCATION *(City and State)*

Territory of American Samoa Hazard Mitigation Plan Update (Island-wide, American Samoa)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2022	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

☒ Check if project performed with current firm

Scope: Christina led the development of the hazard mitigation plan's risk and vulnerability assessment, which analyzed hazard impacts on structures, community lifelines (e.g., roads, utility networks, critical facilities), vulnerable populations, and cultural resources. This all-hazards plan emphasized climate adaptation and nature-based solutions, such as living shorelines and the importance of coral reefs in providing shoreline protection. • **Size:** Territory-wide • **Cost:** $54K • **Role:** Risk Assessment Lead

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Benjamin (Ben) Berridge, AICP, PMP	Environmental Planner	15	10

15. FIRM NAME AND LOCATION (City and State)

Stantec GS Inc. (Honolulu, HI)

Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan.

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE
BA, Environmental Studies	Certified Planner #384544, American Planning Association, American Institute of Certified Planners Project Management Professional – Project Management Institute

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Memberships: American Planning Association, Hawai'i Chapter, Association of Environmental and Health Sciences Foundation

Additional Training/Certifications: Project Management Professional (PMP) Boot Camp, Batelle Memorial Institute/Coastal Marine Spatial Planning Advanced Training Certificate

19. RELEVANT PROJECT S

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
City and County of Honolulu NPDES MS4 Monitoring (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben managed all Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination system (NPDES) permit required monitoring and reporting for the City and County of Honolulu, Storm Water Branch. He also managed collection of storm water samples at 75 industrial facilities throughout the island of Oahu. Duties included investigating, planning and installation of remote water quality and atmospheric monitoring stations to collect first-flush storm water samples according to 40 CFR 136 and EPA guidelines. Ben provided QA/QC oversight of telemetered monitoring stations incorporating data logged by automated sampling equipment, water quality sensors, as well as area-velocity sensors and pressure transducers providing continual flow records and site conditions. He also tracked/archived weather, coordinated 24/7 on-call teams for grab/composite sample collection, maintained rainfall-runoff curves and monitored automated sampling equipment. • **Size:** N/A • **Cost:** $462K (2022) • **Role:** Project Manager/Environmental Planner

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Environmental Monitoring Services for Geothermal Energy Conversion Plant, Puna Geothermal Venture (Pāhoa, Hawai'i Island, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provides environmental monitoring services to Puna Geothermal Venture, in Pāhoa, Hawai'i. Services include meteorology, noise, air quality, and groundwater monitoring as required by Geothermal Resource, Underground Injection Control, and Noncovered Source Permits from the State of Hawai'i Department of Health (DOH). He manages data collection (EDAS), conducts QA/QC process for daily air quality reports, and authors semi-annual hydrological monitoring reports and monthly noise, meteorological, and air quality monitoring reports. Field activities include semi-annual groundwater sampling and calibration of meteorological monitoring equipment. • **Size:** N/A • **Cost:** $2.4M • **Role:** Program Manager/Environmental Planner

c.

(1) TITLE AND LOCATION *(City and State)*
Engineering and Environmental Planning Studies for Alternative Energy at PMRF (Kekaha, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2021	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided oversight and management of engineering and environmental planning studies to support current and future resiliency and energy requirements for Pacific Missile Firing Range (PMRF) in Kekaha, Kauai, Hawai'i. As part of a PMRF energy resiliency roadmap, the project team completed assessments to determine the viability and sustainability of alternative energy solutions, to include a cost benefit analysis of waste to energy (WTE) and other alternative energy technologies. In addition, the team consulted with cooperating government agencies, State, County, local utilities including Kauai Island Utility Cooperative (KIUC) and local industry for the island of Kauai. The project team analyzed the impacts on cultural and natural resources and recommended mitigation measures to minimize potential impacts. Environmental planning data collected was used for future National Environmental Protection Act (NEPA) documents for PMRF. • **Size:** N/A • **Cost:** $510K • **Role:** Program Manager/Environmental Planner

d.

(1) TITLE AND LOCATION *(City and State)*
Environmental Impact Statement for Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility Dry Dock and Waterfront Production Facility at JBPHH (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided management and oversight of the development of a large, multifaceted, and high-profile Environmental Impact Statement (EIS) evaluating improvements, repairs, and/or new construction in support of Joint Base Pearl Harbor Hickam (JBPHH) submarine dry dock and dry dock production facility infrastructure, which is part of the US Navy's Shipyard Infrastructure Optimization Program (SIOP). Coordinated evaluation of four alternatives and a no action alternative in detail, ESA Section 7 consultation including Biological Assessment, Essential Fish Habitat Assessment, NHPA section 106 consultation, and USACE CWA Section 404 permitting and compensatory mitigation planning, as well as State of Hawai'i Department of Health (HDOH) CWA Section 401 water quality certification support. • **Size:** N/A • **Cost:** $5.5M • **Role:** Project Director/Environmental Planner

e.

(1) TITLE AND LOCATION *(City and State)*
Biological and Benthic Habitat Survey in Support of SIOP and INRMP for JBPHH (Honolulu, HI)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2023	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Ben provided oversight and management of various biological and benthic studies to document benthic habitats, coral density and cover, biofouling communities, fish species, and protected species in support of Navy Shipyard Infrastructure Optimization Program (SIOP) as well as a revision of the Joint Base Pearl Harbor Hickam (JBPHH) Integrated Natural Resources Management Plan (INRMP). Project team supported Navy consultations with various agencies and provided data supporting recommendations for which corals found within the multiple construction footprints can potentially be successfully relocated. Project team developed a GIS web application that showcases all study findings during the entire project duration in an easily navigable interactive platform. • **Size:** N/A • **Cost:** $1.3M • **Role:** Project Director/Environmental Planner

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Tyler Hadacek	Advanced Water Treatment Lead	11	11

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Austin, Texas)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Environmental Engineering BS, Civil and Environmental Engineering	Registered Civil Engineer #84298, CA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Tyler is a senior process engineer with experience in water, wastewater, and water reuse treatment, covering projects from master planning through conceptual design, final design, permitting, and support during construction. His experience includes managing and designing conventional and advanced treatment plants for water and wastewater, treatment plant rehabilitation and expansion, unit process retrofits, wellhead treatment systems as well as conducting planning studies, water quality studies, and treatment plant operations support. He has been extensively involved in many integrated water resources and water reuse projects including alternative delivery design-build, with an emphasis in groundwater treatment, advanced treatment, disinfection, and membrane processes. He has worked on treatment facilities ranging from distributed/well-head application to full scale plants of up to 500 mgd.

Member, American Water Works Association
Member, California Water Environment Association

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Weymouth Water Treatment Plant Filter Rehabilitation Design and Construction (Los Angeles, CA)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Tyler performed site assessment and was a process engineer for the rehabilitation of 48 filters for a 500-mgd drinking water plant for Metropolitan Water District. He was the primary engineer managing the development of specifications for the contract documents. This project has required great attention to detail and awareness of client engineer and operator preferences in the rehabilitation of an existing plant that is more than 70 years old and is crucial to delivering water to end users in Southern California.
Role: Process Engineer

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Pure Water Southern California - Advanced Water Treatment Demonstration Facility (Los Angeles, CA)	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Tyler was a process engineer and operator for Metropolitan's Advanced Water Treatment Demonstration Facility, now known as the Advanced Purification Center (APC). He was involved extensively in the treatment process design and equipment procurement, including developing the prequalification documents for the MBR, MF, and UV/AOP equipment. He was also the lead process engineer for the UV disinfection and UV/AOP systems. Tyler has been involved through construction, commissioning, and operations. He was an operator for the facility through the first year and half of testing and monitoring to assist in gaining regulatory approval for the full-scale facility, performing operations, testing, maintenance, and troubleshooting activities. The APC is part of Metropolitan's Pure Water Southern California Program (PWSC)--a regional water supply program that plans to augment groundwater supplies via indirect potable reuse. The full-scale facility will treat secondary effluent from the LACSD Joint Water Pollution Control Plant through MBR, MF, RO, and UV/AOP.
Role: Process Engineer

c.

(1) TITLE AND LOCATION *(City and State)*: Hyperion MBR Pilot Facility (Los Angeles, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2019 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Tyler assisted with the detailed design, commissioning and operations plan for a 1.0-mgd AWT demonstration facility including MBR-RO-AOP process train. The facility will be used to collect operational data for future modification of the high-purity oxygen Hyperion WWTP into a 70-mgd MBR facility.
Role: Process Engineer

d.

(1) TITLE AND LOCATION *(City and State)*: Program Management Services - Pure Water Antelope Valley (Palmdale, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Tyler is managing Stantec's interdisciplinary design team to deliver the demonstration facility design package for construction. He is overseeing the process design, including UF, RO, UV-AOP and pre-procurement of the process equipment for the demonstration facility. Tyler will also develop the full-scale design criteria for a 5-MGD AWT.
Role: Process Engineer

e.

(1) TITLE AND LOCATION *(City and State)*: Tapia WRF Summer Discharge Compliance Design and ESDC - Chlorination/Dechlorination System (Calabasas, CA)

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2024 | CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE — ☒ Check if project performed with current firm

The Las Virgenes-Triunfo Joint Powers Authority (JPA) own and operate the Tapia Water Reclamation Facility (Tapia) that discharges its treated effluent for part of the year to Malibu Creek. Stantec helped the JPA conduct an alternatives evaluation and subsequent preliminary design considering multiple options for meeting the nutrient requirements in the discharge to the creek of 1.0 mg/L total nitrogen (TN) and 0.1 mg/L total phosphorous (TP). The option of using potable water and performing ammonia removal was selected and Stantec is performing the detailed design for this system, including new 1,200 LF water pipeline and chlorination and dechlorination contactor and chemical systems. Tyler conducted process evaluation, preliminary design, and oversaw the design, permitting, support services during construction, and commissioning.
Role: Project Engineer

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Michael Adelman	Water Infrastructure Project Lead	12	12

15. FIRM NAME AND LOCATION *(City and State)*

Stantec Consulting Services Inc. (Pasadena, California)

16. EDUCATION (Degree and Specialization)	17. CURRENT PROFESSIONAL REGISTRATION *(State and Discipline)*
MS, Environmental Engineering BS, Civil Engineering	Registered Civil Engineer #82999, CA

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Michael works in the Process group at the Pasadena office. He is interested in the intersection of theory and practice, and he works on both conventional and advanced treatment process engineering for a variety of water, wastewater, water reuse, site remediation, and waste management projects. His work includes experiments at bench-, pilot-, and plant-scale along with water quality modeling; conceptual analysis; process selection and sizing; process design; and engineering support of construction and operation. His process background includes media filtration, flocculation and sedimentation, membrane treatment, water chemistry and stability, disinfection, biological treatment, ion exchange, adsorption, aeration, advanced oxidation, acid mine drainage treatment, and municipal waste composting.

Member, American Water Works Association
Member, WateReuse Association
Member, Southwest Membrane Operator Association
2015 Rudolph Hering Medal from ASCE Journal of Environmental Engineering

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
One Water LA 2040 Plan, Los Angeles, California, United States	2018	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

The City of Los Angeles has an ambitious plan to expand water reuse through the One Water LA 2040 Plan. Michael has provided process engineering support for this program. He developed treatment process options, built and reviewed treatment process models for biological treatment and RO, evaluated RO equipment sizing, and worked on cost estimates.
Role: Process Engineer

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (*If applicable*)
Lloyd Michael WTP UV Hydraulics Study, Rancho Cucamonga, California	Ongoing	

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

The Cucamonga Valley Water District recently installed new UV reactors for disinfection at the Lloyd Michael Water Treatment Plant. During startup, an unexpected hydraulic surge damaged the UV system. The District needed to evaluate various options to prevent a recurrence of this surge. Michael built a hydraulic model to explain how and why the surge had taken place and used the model to evaluate mitigation strategies and determine their design requirements.

c.

(1) TITLE AND LOCATION *(City and State)*
Weymouth Water Treatment Plant Filter Rehabilitation Design and Construction, Los Angeles, California

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Ongoing
CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

The 520-mgd F.E. Weymouth Water Treatment Plant has 48 dual-media filters built in three phases. All of the filters were to be rehabilitated after up to 70 years in service. This rehabilitation encompasses underdrains, media, backwash troughs, surface wash piping, instrumentation, and various other filter and site features. Michael worked on calculations and modeling to develop the process design criteria; hydraulic calculations for the filter HGL, plant integration, and backwash trough sizing; surveys and documentation of existing features; investigation of alternative underdrains; and preliminary design drawings. He coordinated the technical delivery of the final design and worked with the client operations and design staff to get buy-in on design decisions. He also provided engineering services during construction of the filter rehabilitation at the treatment plant. He coordinated the review of submittals and requests for information and helped to develop change orders. Michael also worked with the manufacturers of the filter underdrain and media on quality testing, including sieve analysis, flume tests, and full-scale flow distribution measurements. **Role:** Process Engineer

d.

(1) TITLE AND LOCATION *(City and State)*
San Fernando Basin Groundwater Remediation Project (Los Angeles, CA)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: 2023
CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

The Los Angeles Department of Water and Power (LADWP) is undertaking the San Fernando Basin (SFB) Remediation Program to respond to the historical releases of hazardous substances in one of the largest contaminated groundwater areas in the United States, and restore and protect the full use of the SFB as a source of water. As part of this program, LADWP engaged Kiewit and Stantec for design-build procurement of two new treatment plants: the 25-mgd North Hollywood Central facility on a constrained site in a built-up area, and the 50-mgd Tujunga Central facility. Michael is the treatment process lead for this project and coordinated the design of a pretreatment, UV-AOP, and GAC treatment train for each plant. The design includes innovative configurations of pretreatment and GAC for the large scale of the plants. It was delivered on time and on budget despite the COVID-19 pandemic, and site work along with early procurement of major equipment is now underway. **Role:** Process Lead

e.

(1) TITLE AND LOCATION *(City and State)*
Pure Water San Diego Program (San Diego, CA)

(2) YEAR COMPLETED
PROFESSIONAL SERVICES: Ongoing
CONSTRUCTION (*If applicable*):

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Michael coordinated the process sizing, layout, equipment selection, performance modeling, and hydraulics for the reverse osmosis (RO) and biological activated carbon (BAC) systems. He developed novel design methods to address water chemistry issues at the system level, considering everything from the upstream wastewater plant to the receiving reservoir and drinking water system, and he built models to serve as the basis for this design. Michael also designed and coordinated a suite of experiments to evaluate impacts on primary settling performance, whole effluent toxicity, and anaerobic digestion across the range of anticipated future brine blending conditions. Additionally, he worked on a study of the implications of potable reuse for the treatment and distribution in the drinking water system. He led bench-scale and pilot-scale testing and water chemistry analysis to investigate coagulation, flocculation, filterability, and chemical stability of blends containing a large fraction of ultra-pure potable reuse water. The Stantec Team is providing program management services for the $3 billion Pure Water San Diego Program—a phased, multi-year program that uses proven technology to produce a safe, reliable, and cost-effective water supply for the City. The Program will help the City overcome its water challenges by transforming the City's water system into a complete water cycle that maximizes use and reuse of the City's water supply. **Role:** Process Engineer

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Zakir Hirani, PE, BCEE	Technical Advisor – Water/Wastewater	20	18

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Pasadena, CA)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Environmental Engineering B.Eng., Civil Engineering	Professional Engineer #77284, CA

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Zakir is a licensed process engineer with expertise in physiochemical and biological treatment of water and wastewater. He is experienced in several aspects of water and wastewater treatment including pilot studies, conceptual process design, modeling, detailed design, engineering services during construction, start-up/commissioning and process troubleshooting. Zakir has process design experience with microfiltration and ultrafiltration (MF/UF), MBR, reverse osmosis (RO), ozone, ultra-violet disinfection (UV), advanced oxidation processes (AOP including UV/H2O2 and Ozone/H2O2). Zakir has worked on numerous advanced water treatment (AWT) projects including MWD's AWT Demonstration Facility, City of LA's Hyperion Advanced Water Purification Facility, and the City of San Diego's Pure Water Program.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hyperion 2035 Program (Los Angeles, CA)	ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: This program will convert the 260-MGD Hyperion Water Reclamation Plant into an AWT facility. Zakir led the conceptual design of a 1.5-MGD AWT Production Facility and detailed design of a 1.0-MGD AWT Demonstration Facility; both included MBR-RO-AOP process train. The Demonstration Facility will be used to collect operational data for future conversion of HPOAS to MBR and the Production Facility is intended to produce high quality effluent for reuse nearby. Zakir is currently working on several planning studies for the full-scale facility including side stream centrate treatment, HPOAS to FBDA and MBR conversion, AWT processes conceptual designs and others. **Size:** 260 MGD **Cost:** $3.4B **Role:** Process Lead

b.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Conceptual Design of an Advanced Water Treatment (AWT) Facility (Carson, CA)	2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir led the process design for the $1.1B Advanced Water Treatment (AWT) Demonstration facility, consisting of MBR, RO and AOP (UV/H2O2) process train that will be utilized to collect sufficient operational and water quality data for design of a 150-MGD AWT facility at the Joint Water Pollution Control Plant. While using MBR as a pretreatment to RO, the facility will be the first of its kind to seek approval of the MBR-RO-AOP process train for indirect potable reuse. Zakir also led the conceptual design of a 150-MGD AWT facility consisting of an MBR-RO-AOP process train. **Size:** 150 MGD **Cost**: $1.1B **Role:** Process Lead.

c.

(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Conceptual Design of Advanced Water Treatment Facilities (Los Angeles, CA)	2016	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir is leading the conceptual design of a 1.5-MGD AWT Production Facility and a 1.0-MGD AWT Demonstration Facility. Both facilities included MBR-RO-AOP process train. The $70M Demonstration Facility is intended to collect sufficient operational data for future modification of the high-purity oxygen Hyperion WWTP into a 70-MGD MBR facility and the Production Facility is intended to produce high quality effluent for use at the Los Angeles World Airport (LAWA), Scattergood Power Plant and on-site plant use. The project is currently under construction. **Size:** 1.5 MGD and 1.0 MGD **Cost:** $70M **Role:** Process Lead.

d.

(1) TITLE AND LOCATION *(City and State)*

Pure Water San Diego Program (San Diego, CA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir provided technical review, as part of Program Management services, for a 34-MGD AWT facility consisting of MF/UF, RO and UV/AOP processes to treat secondary effluent from the North City Water Reclamation Plant. The treated effluent will be used for augmentation of the Miramar reservoir. Zakir also reviewed the treatment alternatives for Phase 2 of the program that may include a 54 MGD MBR-based potable reuse train. The $3B program is scheduled to reach full implementation by 2035. **Size:** 34 MGD **Cost:** $3B **Role:** Technical Reviewer

e.

(1) TITLE AND LOCATION *(City and State)*

Wastewater Treatment Plant Expansion (Gilroy, CA)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Zakir is providing technical review for the 2.5-MGD MBR facility built to expand the treatment capacity of the existing conventional activated sludge plant (oxidation ditch) to 11 MGD. The $50M expansion consists of headworks (pump stations and fine screens), nitrification-denitrification bioreactor basins, membrane basins, internal recycle and return sludge pumping. The project is currently out for bid. **Size:** 11 MGD **Cost:** $50M **Role:** Technical Reviewer

County of Hawai'i

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS SERVICE CATEGORY

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN SERVICE CATEGORY	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sarang Agarwal, PE	Project Engineer	9	9

15. FIRM NAME AND LOCATION (City and State)

Stantec Consulting Services Inc. (Honolulu, HI)

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
MS, Civil Engineering (Water/Wastewater) BS, Civil Engineering	Professional Engineer #138534, TX

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Sarang is a Professional Engineer with a Master of Science in Civil Engineering from Texas A&M University, College Station, specializing in Water/Wastewater Treatment. Sarang has been an indispensable team member in providing services for projects such as the Kingwood Central Wastewater Treatment Plant Improvements Project and Barry Rose Wastewater Treatment Plant Improvements Project. Sarang's responsibilities have included condition assessment for different facilities, hydraulic and process calculations, and Biowin modelling for various treatment plants, preparing design drawings and specifications, and developing quantity and cost estimates. Sarang has worked on various wastewater treatment plants in the Houston region, for all aspects of treatment plant including lift stations, headworks, secondary treatment, disinfection, and sludge handling facilities.

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
a.	SIWWTP Secondary Treatment Phase 2 (Honolulu, HI)	Ongoing	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: In a joint venture with RMTC, Sarang serves as project engineer for Phase 2 of the expansion, which will provide the additional 90 MGD of secondary treatment capacity required to meet full secondary standards and support future growth. Phase 2 will also add peak flow equalization, upgrade preliminary and primary treatment, and expand solids treatment processes to treat the additional waste activated solids generated by the new secondary process. The Phase 2 project also includes an Organic Waste Sustainability Plan (OWSP), which will explore sustainable approaches to utilize different feedstocks, such as fats, oils, and grease (FOG), and commercial food waste to supplement anaerobic digestion and create opportunities for reducing greenhouse gas emissions and produce green power through cogeneration. **Size**: 90 MGD **Cost:** $1.5B **Role:** Stantec Project Engineer

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
b.	Kingwood Wastewater Treatment Plant Improvements (Houston, TX)	2017	2020

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Kingwood Central WWTP has a 7 MGD average and 37 MGD peak flow facility. The project included improvements to tertiary filtration, solids facility and UV channel improvements. Project also includes floodplain analysis and mitigation improvements at the site. Sarang provided general engineering support, detailed design drawings and designed solids facility with new belt filter press, polymer feed system and conveyors. Sarang also supported the project during construction phase. **Size:** 37 MGD **Cost:** $3.5M **Role:** Project Engineer

	(1) TITLE AND LOCATION *(City and State)*	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
c.	Barry Rose Wastewater Treatment Plant Expansion (Pearland, TX)	2017	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: Barry Rose WWTP is undergoing an expansion going from 3.1 MGD to 8.5 MGD, decommissioning of Longwood WWTP and transfer of flows to Barry Rose. Project included service area analysis and modelling, alternative evaluation between MBR and SBR technologies, preliminary design for selected MBR option and exploration of future reuse capabilities. Sarang's responsibilities included design of influent lift station, headworks facility, tertiary filtration, solids facility and engineering support on other treatment processes. Sarang developed site development plans, health and safety plans, life cycle cost estimates and performed condition assessment. Sarang was also responsible for calculations for different process areas, Biowin modelling for the treatment systems and preparing preliminary engineering reports and preliminary drawings. **Size:** 8.5 MGD **Cost:** $10M **Role:** Project Engineer.

d.

(1) TITLE AND LOCATION *(City and State)*: Lift Station Renewal and Replacement (FY-14) (Houston, TX)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2018	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☒ Check if project performed with current firm

Scope: The project included final design for City of Houston Fiscal Yar 2014 Lift Station Improvements. This included rehabilitation of four lift stations (Westmont - 7 MGD, Northshore - 15 MGD, Maxey Rd. - 16 MGD and Mesa Dr. - 1.55 MGD), decommissioning of one lift station (East ten park - 1 MGD) and design for one new lift station (East ten park - 1.55 MGD) . Project also included a 30-inch gravity sewer main. Sarang's responsibilities include design engineering lead for civil and mechanical design, performing hydraulic calculations, coordination with different disciplines and subcontractors, preparing final design drawings and specifications, and coordination with permitting. The estimated construction cost for the project is $12.5M. **Size:** Five lift stations and a 30-inch gravity sewer main **Cost:** $12.5M **Role:** Project Engineer

e.

(1) TITLE AND LOCATION *(City and State)*: Hurricane Harvey Disaster Cost Recovery for Wastewater Treatment Plant (Houston, TX)

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2019	N/A

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE ☐ Check if project performed with current firm

Scope: The project included assessment of four different wastewater treatment plants after Hurricane Harvey for City of Houston and preparation of reports for FEMA cost recovery. Sarang's responsibilities included evaluation of existing asset inventory (InforEAM), conduct site visits to perform asset condition and preparing damage assessment reports and associated cost estimates. The following treatment plants were included - Kingwood Central WWTP (37 MGD), Imperial Valley WWTP (9.7 MGD), WCID 47 WWTP (20.1 MGD) and Forest Cove WWTP (3.8 MGD). **Size:** N/A **Cost:** N/A **Role:** Project Engineer

County of Hawai'i

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **1**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
County of Maui Department of Water Supply, FEMA Recovery – Engineering Services (Maui, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui	John Stufflebean	808-270-7816

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

KEY RELEVANCE

Scope:
- FEMA PA Coordination
- Federal Agency Funding
- Project Funding Analysis
- Economic evaluation

Cost: $1.4M

Key Personnel:
- Bob Armstrong
- Lisa Davidson
- Kim Pugel
- Sheryl Campagna

To support the County of Maui Department of Water Supply (DWS) in their response to the devasting fires of August 2023 in Lahaina and Kula, Stantec, along with key subconsultant partner, Synergy Disaster Recovery, is working to secure funding sources to return water services to the affected areas and harden the water system against future disasters. A greater part of these services has included working within the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Program. This close coordination with FEMA involves parallel direct coordination with local jurisdiction agencies, Hawaii Emergency Management Agency (HI-EMA), Maui Emergency Management Agency (MEMA) as well as the US Department of Housing and Urban Development (HUD), US Army Corps of Engineers (USACE), US Environmental Protection Agency (EPA), US Department of Agriculture (USDA), US Bureau of Reclamation (USBOR), and other local, County, State, and private entities. The Stantec Team is working with other consultants of DWS who are providing condition assessment, cost development, and other engineering support tasks to optimize a FEMA Project Strategy. For example, under the FEMA PA Program, the Stantec Team is supporting DWS in assessing several ways to formulate projects. Stantec is helping DWS weigh advantages, disadvantages, and considerations to identify which formulation may be the most advantageous for their situation. These considerations differ for Small and Large FEMA project worksheets. This also includes assessing when the PA funding will not be used to restore a given facility pre-disaster design and function; referred to as a "standard" project.

Essentially, the goals of Stantec's efforts with DWS are to support completion, compilation, and submission of any and all necessary reports, forms, and paperwork in accordance with FEMA regulations and other funding mechanisms. This includes developing strategies for assessing applicability and availability of other funding mechanisms through EPA, HUD, USACE, and other Federal, State, and private sources; coordinating with federal agencies; with following-up with actionable funding strategies; and pursuing grants and loans, as appropriate. Implementation of the funding strategy has already begun, including developed include earmarks and requesting $13M in Congressionally Directed Spending, formulating $180M in grant requests through FEMA Hazard Mitigation Program (HMGP), queuing up another $20M in design and construction funds through the USDA Water and Waste Grant/Loan Program, and getting $15M in projects listed on the FY25 Hawaii Department of Health (HI-DOH) Fundable List for Emerging Contaminant grants and HI-DOH State Revolving Fund loans. In addition to the PA Program focus, the Stantec Team is also shepherding Technical Assistance (TA) requests to assist DWS to build and sustain specific emergency management program capabilities by providing services and analytical capacities drawn from within FEMA, from other Federal Departments and Agencies and from other subject matter experts.

This project is ongoing. To date, the Stantec Team has worked with DWS and all the appropriate agencies to identity approximately $33M in potential FEMA PA projects (with nearly 90% potentially seeing Federal cost sharing) and begin to apply for the over $500+ Million in grant and loan funding identified as potential funding sources for other priority long-term recovery projects.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY

Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: **2**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui Hazard Mitigation Plan Update (Maui, HI)	2020	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui	Jamie Caplan	413-586-0867

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec developed the risk assessment for the 2020 Maui County Hazard Mitigation Plan (as a subconsultant to JCC). The plan included the island of Maui and the outer islands of Molokaʻi, Lānaʻi, and Kāhoʻolawe. We assisted the County to identify hazards (natural and man-made) and to assess current and future vulnerability including climate change). For each hazard, Stantec evaluated current and future hazard probabilities, severity, and impacts. Examples of hazards included are sea level rise, coastal erosion, extreme heat, vog, hazardous materials incident, and public health risks (including infectious disease and pandemic).

KEY RELEVANCE

Scope:
- Hazard Mitigation Plan
- Climate Change Vulnerability Assessment
- Economic Valuation of Risk
- Social Vulnerability
- Public Outreach

Size: Maui County
Cost: $54K
Key Personnel:
- Christina Hurley

The risk assessment includes consideration of all available structures (i.e., residential, commercial, government, etc.) and critical assets including community lifelines such as water utilities, power, emergency services, ports, and schools. An estimated dollar loss was estimated for each asset as data permitted and included the use of FEMA's Hazus-MH, a hazard loss estimation software, for flood, earthquake, and tsunami hazards. The plan also integrated FEMA Community Rating System (CRS) requirements such as assessment of life safety, warning and evacuation Impacts, economic impacts, and social considerations for each hazard. A social vulnerability index (SVI) was developed which was aligned to hazards by the Stantec team. Plan results were presented at the structure level and grouped using Maui County's eight community planning areas in alignment with the county's comprehensive plan. Community planning areas are also a benefit to hazard impact evaluation as they group areas by region, allowing for more precise impact considerations across the county due to variations in topography, wind and rainfall patterns, and coastal conditions, among other characteristics.

In addition to developing the risk assessment, Stantec assisted with outreach including on island and virtual public and hazard mitigation planning team meetings on Maui and Molokai. Our FEMA-compliant risk assessment informed the county's mitigation strategy, an actionable set of infrastructure, nature-based, and policy activities to reduce future disaster impacts. The plan passed FEMA compliance review on the first pass, making the county eligible for pre- and post-disaster hazard mitigation funding.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY

Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER: **3**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Maui America's Water Infrastructure Act (AWIA) Compliance (Honolulu, HI)	2021	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui		808-270-7417

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec is providing support to the County of Maui's Department of Water Supply to achieve compliance with the America's Water Infrastructure Act (AWIA) signed into law on October 23, 2018. Per Section 2013 of Title II, the AWIA requires utilities to conduct a Risk and Resilience Assessment (RRA) for public water systems serving more than 3,300 people and developing a corresponding Emergency Response Plan (ERP). Upon completion of the RRA and ERP, utilities are to submit self-certification to the U.S. Environmental Protection Agency (EPA) indicating that the RRA and ERP are complete and in compliance with the AWIA. The DWS is a municipal water utility providing drinking water to approximately 119,000 residents on the islands of Maui and Molokai. The DWS operates 12 public water systems, and the largest system is Wailuku, serving approximately 68,000 people.

KEY RELEVANCE

Scope:
- AWIA Compliance
- Risk and Resilience Assessment (RRA)
- Emergency Response Plan

Size: 12 public water systems located on Maui and Molokai
Cost: $117K

Stantec has completed the RRA for each of the DWS public water systems and the water utility, based on the AWIA requirements and materials provided by DWS in collaboration with all DWS Divisions and related county agencies. The assessment followed the American Water Works Association's JI00-10 Risk and Resilience Management of Water and Wastewater Systems standards. The assessment included:

- Resilience of pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage, and distribution
- Resilience of SCADA, electronic, computer, and other automated systems including the security of such systems
- Monitoring practices of the system and the financial infrastructure
- Operation and maintenance of the water system and the use, storage or handling of various chemicals
- Update of the current DWS ERP, dated August 2018, to comply with the AWIA requirements and the RRA and encompass each of the DWS public water systems

The ERP update, which is now underway, will support consolidation of the DWS current emergency policies and procedures and will include:

- Strategies and resources to improve the resilience of the DWS systems, including physical security, and cybersecurity
- Plans and procedures for responding to a malevolent act or a natural hazard that threatens safe drinking water, including alternative water sources, relocating intakes and flood protection barriers
- Strategies that detect malevolent acts or natural hazards that threaten the system

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Walnut Creek, CA; San Diego, CA	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **4**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
FEMA Headquarters PA-TAC IV Zone 1 (Regions I, II, IV) (Nationwide, USA)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
FEMA	Tanya Malloy	864-593-9920

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Stantec currently supports FEMA's PA infrastructure recovery mission as a subcontractor to the Fluor Corporation and previously as a subcontractor to the NISTAC JV. Staff help applicants accelerate recovery from Presidentially declared disasters, guiding them through the federal recovery assistance program delivery model, advising on compliance with the PA Program's eligibility requirements. Staff have deployed to ten Presidentially declared disasters and navigated some of the largest and most complex disasters in this nation's history. These include arbitration case review for Hurricane Katrina and supporting communities impacted by the 2017 catastrophic hurricane's Harvey, Irma, and Maria.

We deploy Program Deliver Managers (PDMG), site inspectors, construction managers, environmental and mitigation specialists, and engineers to document damages and develop repair or replacement scopes of work and cost estimates for impacted facilities contributing to the successful formulation of projects eligible for federal funding. Stantec has placed engineers and estimators on FEMA's Consolidated Resource Center teams, and an engineer to support a FEMA arbitration case. Our technical expertise is also routinely brought to bear in support of federal programs with which the PA Program must comply. These include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), various Executive Orders, and FEMA's 404 and 406 hazard mitigation and floodplain management programs. Of our 60 rostered and badged staff nearly half of them have completed either FEMA's Site Inspection or Program Delivery Manager training.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY

Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

5

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Lahaina Watershed Flood Protection Project (Lahaina, HI)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
County of Maui Department of Public Works	Ty Takeno	808-270-7745

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The Lahaina Watershed Flood Protection Project, previously known as the Lahaina Watershed Flood Control Project, has been over forty years in the making. A portion of the project (30%) has been constructed, and funding is now in place to conduct the engineering and environmental planning needed to complete the remaining planned works. To continue, the project must complete a supplemental watershed plan – the Supplemental Plan Environmental Document (ED). The Supplemental ED is due to significant watershed changes (largely due to the construction of the Lahaina Bypass) since the project's Environmental Impact Statement (EIS), which was completed in 2003.

KEY RELEVANCE

Scope:
- Flood preparedness
- Watershed modeling and analysis
- NEPA/HEPA environmental review

Size: 5250 acres
Cost: $1.5M
Key Personnel
- Sheryl Campagna
- John Nelson

Our team is completing the Lahaina Watershed Flood Protection Project Supplemental Plan Environmental Document. This project involves the development of a Natural Resource Conservation Service (NRCS), National Environmental Policy Act (NEPA), and Hawai'i Environmental Policy Act (HEPA) compliant Supplemental Plan Environmental Document (ED) to evaluate watershed protection measures within the Lahaina Watershed. The proposed project is intended to mitigate for flooding and reduce the impacts of sedimentation. The project work is ongoing.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, HI	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **6**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Miscellaneous Australia Desalinization Projects (Australia)	Ongoing	N/A

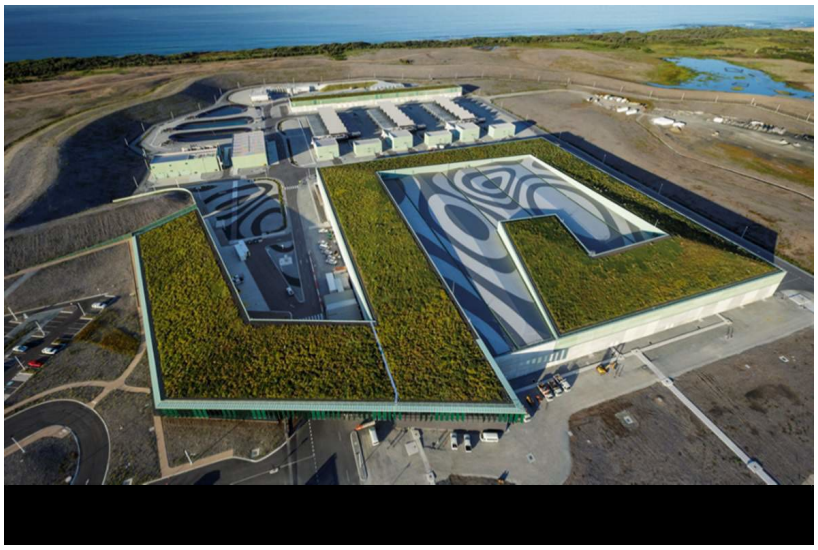
23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Water Corporation	Paul Zahra	9420 2497

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Water Corporation, Alkimos Seawater Desalination Plant

As a part of Perth's integrated water supply strategy, the Western Australian Water Corporation is looking to construct the Alkimos Seawater Desalination Plant to supplement the current metro water supply. Stantec coordinated the approvals strategy and helped ensure the development could meet environmental objectives.



The project consisted of construction and operation of a 832 MGD (43.7m3/s) every year seawater desalination plant and an associated 21 miles (35 km) long integration pipeline. The fully integrated project considered the full spectrum of environmental habitats, from terrestrial and coastal to the offshore marine environment—needing our team's multidisciplinary approach.

We prepared the environmental gap analysis, outlining the key technical environmental data needed to support the development of the public environmental review, and we also coordinated the public environmental review process. Our supporting documents included technical risk assessments (satisfying state and federal legislation), the construction environmental management framework, and a biodiversity offset plan. The turnaround time needed was limited, but we managed to deliver within the Western Australian Water Corporation's eight-week timeframe—helping to inform the next stages in the process.

Our exclusive teammate, Aquatech, complemented and significantly expanded upon our desalination and integrated water solution development.

Victoria Government, The Victorian Desalination Project

Following years of drought and low reserves, the Victorian Government wanted to find a rainfall-independent source of fresh water near the state capital, Melbourne. The long-term solution? The Victorian Desalination Project (VDP)—the largest desalination plant in Australia.

We were appointed as the independent reviewer and environmental auditor on the project—a second set of eyes and trusted partner that would ensure the best possible outcomes for the project. We provided a full range of technical and advisory services to Aquasure and the Department of Sustainability and Environment. These services included regular meetings with the Victorian Government, analysis of project documents, constructability reviews, and a report outlining our findings and suggestions.

Additional components included the following—providing data, signals, monitoring of the facilities and high-speed broadband to the region; energy recovery technology used for the desalination process to minimize consumption and reduce greenhouse gas emissions; living roof with over 100,000 plants; and incorporate of over 225 ha of nature reserve and coastal parks.

With this desalination plant, the Victorian Government were able to secure their water supply against the effects of climate change, population growth, and drought. The desalination plant provided up to 39.6 billion gallons (150 billion liters) of water per year regardless of rainfall, which is more than a third of Melbourne's yearly needs.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting	Australia	Subcontractor

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **7**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Bay Area Regional Desalination Pilot (BARDP) and Planning Project (San Francisco and Santa Cruz, CA)	2010	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
East Bay Municipal Utility District	Hasan Abdullah,	510-287-0550

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY (Include scope, size, and cost)

The Bay Area's four largest water agencies, the Contra Costa Water District (CCWD), the East Bay Municipal Utility District (EBMUD), the San Francisco Public Utilities Commission (SFPUC), and the Santa Clara Valley Water District (SCVWD) are jointly evaluating the development of a shared regional desalination facility to improve water supply reliability of the Bay Area and benefit approximately 5.4 million residents and businesses served by the four agencies. The goal of the BARDPis to develop at least one desalination plant operating on brackish surface water or on seawater to provide supplemental water supply during droughts and emergencies, such as earthquakes and levee failures and maintenance-related outages.

KEY RELEVANCE

Scope
- Flood preparedness
- NEPA/HEPA environmental review

Cost: $1.7M
Size: 5250 acres

A feasibility study recommended conducting a pilot test at CCWD's Mallard Slough Pump Station site located in the eastern part of Contra Costa County. The East Contra Costa site was selected for piloting to fill in the data gap that currently exists regarding desalination piloting in an estuarine environment; other agencies have recently conducted pilot tests in the San Francisco Bay and the Pacific Ocean.

Performance data was collected for two types of ultra-filtration pre-treatment membranes, two types of RO membranes, and one NF membrane. The pilot test allowed for the collection of data on technical feasibility of an East Contra Costa desalination facility.

Stantec prepared the Experimental Plan, designed, built, and operated the pilot plant, supplied technical expertise with an independent technical advisory committee, and prepared the Pilot Plant Report. The Pilot Plant Report included results and conclusions from the pilot study, design criteria and a cost estimate for a full-scale facility.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Denver, CO	Prime
b.	Stantec Consulting Services Inc	Boston, MA	Prime

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **8**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Pure Water (San Diego)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of San Diego	Andrea Demich	619-533-5126

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

Due to limited local water sources, 85% of the City of San Diego's water is imported from the Colorado River and California State Water Project (SWP)—the cost of imported water is rising, having almost tripled in the last 10 years. This lack of control makes San Diego more vulnerable to drought, seismic events and climate change, and threatens San Diego's water reliability. In early 2015, the City retained the Stantec Team to provide program management services for the $3 billion Pure Water San Diego Program – a phased, multi-year program that uses proven technology to produce a safe, reliable and cost-effective water supply for the City. The Program will help the City overcome its water challenges by transforming the City's water system into a complete water cycle that maximizes use and reuse of the City's water supply. The original implementation plan for the Program envisioned 15 mgd of purified water production by 2023, 30 mgd by 2027, and 83 mgd by 2035. Now, the City's plan involves 30 mgd of purified water production in Phase 1. At full implementation in 2035, the Program will provide nearly half of San Diego's water supply locally and will reduce the City's ocean wastewater discharges by 50%.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	San Diego, CA	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY
Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
9

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Hyperion 2035 Program: Facilities Planning and Conceptual Design (Los Angeles, CA)	Ongoing	N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of New Orleans Project Delivery Unit	Mary Kincaid	504-658-8048

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY *(Include scope, size, and cost)*

The City of Los Angeles' Hyperion 2035 Program will achieve the ambitious goals of locally sourcing 70% of Los Angeles' water and recycling 100% of Hyperion wastewater by the year 2035—both are key factors in increasing the City's climate change resilience and drought reliability. Stantec is assisting the City in developing the planning framework that will guide implementing the improvements required to achieve these goals. Stantec's efforts include program management as well as creating the technical roadmap that defines processes and their design basis (preliminary concept planning). Stantec is supporting the construction of an MBR pilot testing facility (1 MGD) to obtain regulatory approval of the planned process train and are working closely with the IAP to develop testing protocols. Testing includes three different MBR suppliers, two RO systems, and one UV-AOP unit. Stantec also assisted with conceptual design, alternative delivery procurement, and regulatory approval for the 1.5-MGD Advanced Water Purification Facility (AWPF) to serve non-potable uses at the Los Angeles International Airport.

KEY RELEVANCE

Scope:
- Master Planning
- Condition Assessment & Process Evaluation
- Site Evaluation & Site Planning
- Preliminary Treatment Evaluation/Design
- Primary Treatment Evaluation/Design
- Secondary Treatment Evaluation/Design
- Tertiary and AWT Treatment Evaluation/Design
- Water Reuse
- Electrical and Instrumentation Analysis & Planning
- Hydraulic Evaluation (Gravity/Pressurized Flows)
- Pumping Stations & Collection System
- Alternatives Analysis
- • Life Cycle Cost Evaluation (Capital+O&M) CIP
- Value Engineering
- Project Prioritization & Packaging
- Program Management
- Delivery Method Selection & Planning
- Alternative Delivery
- Stakeholder Coordination
- Regulatory Compliance/Permitting

Cost: Multi-billion-dollar

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Los Angeles, CA	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE FIRM'S QUALIFICATIONS FOR THIS SERVICE CATEGORY *Present no more than 10 projects, with emphasis on previous City projects. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **10**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Various Well Projects from Florida (Statewide, Florida)	Ongoing	Ongoing

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
SFWMD	Jennifer Gent	954-701-1773
WASD	Virgina Walsh	786-552-8266

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS SERVICE CATEGORY (Include scope, size, and cost)

ASR Well Program: South Florida Water Management District (SFWMD)

The Lake Okeechobee Watershed Restoration Project (LOWRP) ASR Wells are a component of the LOWRP parent project. The LOWRP is a Comprehensive Everglades Restoration Plan (CERP) planning effort designed to improve water levels in Lake Okeechobee; improve the quantity and timing of discharges to the St. Lucie and Caloosahatchee estuaries; increase the spatial extent and functionality of wetlands; and improve water supply for existing legal water users. The project includes construction of 55 ASR wells located in clusters at up to eight locations throughout the Lake Okeechobee watershed. Each well will be capable of pumping 5 MGD each for a total of 275 MGD of storage and recovery capacity.

Stantec was selected by SFWMD to evaluate the potential for developing the eight sites for the construction of ten ASR well pairs at each site (55 wells total). These services also include permitting support, design, and construction management. Each well pair will consist of an Upper Floridan Aquifer (UFA) and an Avon Park Permeable Zone (APPZ) ASR well. The UFA wells are approximately 900 feet deep and the APPZ wells will be approximately 1,500 feet deep. The water will be pumped from local rivers and canals during the wet season when excess water is available, treated and stored in the aquifers. Recovery of the water from the aquifers will occur during the dry season to the same water bodies to improve surface water quality and levels. The treatment systems are also being designed concurrently with the ASR test wells and each plant will be able to treat to drinking water standards. This is one of the largest aquifer storage and recovery projects in the world at this time and is expected to take several years to complete. The State of Florida has approved the initial $400 million for the project, and it is anticipated that an additional $600 million will be budgeted to complete the project.

Miami-Dade Hydrogeologic Services: Miami-Dade County Water and Sewer Department (WASD)

Stantec was selected to perform hydrogeologic/geologic services and consultation related to WASD's Wellfields, Injection Wells and ASR Wells, which included geochemical studies, groundwater modeling, monitoring, testing, permitting, design, specialized hydrogeologic oversight during construction and other services as needed. Injection wells refer to Underground Injection Control (UIC) Class I or Class V Exploratory wells that are drilled into the Lower Floridan Aquifer, including the Boulder Zone and Cretaceous formations beneath the Lower Floridan Aquifer. Stantec also provided provide hydrogeologic services to WASD by planning and optimizing use of current and future Class I and Class V injection and ASR well systems in the Miami-Dade County.

Stantec is providing planning, design, permitting, and technical oversight services for 16 new Class I Injection Wells at the North, Central, South, and future West District Wastewater Treatment Plants to support WASD in addressing the 2008 Ocean Outfall Legislation (OOL) requirements to cease using ocean outfalls by 2025. WASD is increasing their injection well capacity by 280 million gallons per day as part of the OOL program. FDEP UIC has already issued the construction permit for 7 Class I and 4 dual zone monitoring wells at the Central District Plant. The project is currently in the bidding phase.

The WASD along with the U.S. Geological Survey (USGS) developed a countywide integrated surface water/groundwater model published in 2013 that was used to evaluate travel times and capture zones around WASD's wellfields to guide the County on revising wellfield protection areas. To address the stakeholders' concerns, the Miami-Dade County Board of County Commissioners directed county staff to consider the stakeholders' concerns and to conduct further scientific investigations of the proposed revised wellfield protection areas. In fulfillment of the directive from the Board, Miami-Dade County Department of Environmental Resources Management (DERM) established a technical work group (TWG) to evaluate the stakeholder concerns with respect to the USGS modeling effort and make recommendations to address the stakeholders' concerns. Of particular concern is contaminant travel time within rock mine pit excavations which was not specifically modeled in the USGS effort. We have also been contracted by WASD to implement the TWG's recommendations. Our team has been contracted to conduct peer review of WASD's surface water/groundwater modeling efforts to support their proposed SFWMD Water Use Permit (WUP)modification. Stantec's team is also supporting the WASD modeling staff of determining the feasibility of utilizing the C-51 Reservoir Project to increase the Biscayne Aquifer WUP allocation.

25. FIRMS INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	Stantec Consulting Services Inc.	Honolulu, CA	Primary Consultant

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN EXAMPLE PROJECT	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Bob Armstrong	Water/Wastewater Lead & Contract Manager	X				X				X	
Sheryl (Sherry) Campagna	Hawaii-based Coordination Lead	X	X			X					
Lisa Davidson	FEMA Coordination Lead	X									
Kim Pugel	Grant Application and Management Lead	X									
Charles Bromley, PE	Desalination Technical Lead						X	X	X		
Rick Cowles, PG	Aquifer Storage and Recovery Expert										X
Neil Johnson, PG , PMP, CGC, WWC	Aquifer Storage and Recovery Technical Lead										X
Dave Pernitsky, PE	Water System Planning and Design Lead									X	
John Nelson	Hawaii-based Environmental Lead	X									
John Maleug, PE	Resilient Infrastructure Lead	X			X						
Adam Butler, PE	Asset Management Lead										
Enli Li, PE	Honolulu-based Project Manager	X									
Christina Hurley, AICP	Senior Hazard Mitigation Planner		X	X							
Benjamin Berridge, AICP, PMPP	Environmental Planner										
Tyler Hadacek, PE	Advanced Water Treatment Lead							X	X	X	
Michael Adelman, PE	Water Infrastructure Project Lead								X	X	
Zakir Hirani, PE, BCEE	Technical Advisor – Advances Treatment						X	X	X	X	
Sarang Agarwal, PE	Project Engineer	X									

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	County of Maui Department of Water Supply, FEMA Recovery – Engineering Services	6	Miscellaneous Australia Desalination Projects
2	Maui County Hazard Mitigation Plan Update	7	Bay Area Regional Desalination Pilot (BARDP) and Planning Project
3	Maui America's Water Infrastructure Act (AWIA) Compliance	8	Pure Water Program – San Diego
4	FEMA Headquarters PA-TAC IV Zone 1 (Regions I, II and IV)	9	Hyperion Water Reclamation Facility
5	Lahaina Watershed Flood Management Project	10	Various Well Projects from Florida

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

The Stantec Advantage

Stantec empowers clients, people, and communities to rise to the world's greatest challenges at a time when the world faces more unprecedented concerns than ever before.

We are a global leader in sustainable engineering, architecture, and environmental consulting. Our professionals deliver the expertise, technology, and innovation communities need to manage aging infrastructure, demographic and population changes, the energy transition, and more.

Today's communities transcend geographic borders. At Stantec, community means everyone with an interest in the work that we do—from our project teams and industry colleagues to our clients and the people our work impacts. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure.

We are designers, engineers, scientists, project managers, and strategic advisors. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

Stantec trades on the TSX and the NYSE under the symbol STN. Visit us at Stantec.com or find us on social media.

The Stantec community unites more than 32,000 employees working in over 450 locations • We collaborate across disciplines and industries to bring buildings, energy and resource, and infrastructure systems to life. Our work– professional consulting in planning, engineering, architecture, landscape architecture, surveying, environmental sciences, project management, and project economics- begins at the intersection of community, creativity, and client relationships. With thousands of employees on six continents, Stantec offers a global team of program managers, business consultants, engineers, geologists, operators, scientists, technologists, and regulatory experts who provide solutions to the world's most challenging projects.

One Stantec team • Stantec Consulting Services Inc. and Stantec GS Inc. staff collaborate as one united Stantec team. Stantec GS Inc. is owned and operated by Stantec Consulting Services Inc. through an internal affiliated operations plan. Cardno GS, Inc., now known as Stantec GS Inc., was acquired by Stantec on December 6, 2021. Since 1989, Stantec GS Inc. has provided environmental, A-E, and other asset management services for our clients in Hawai'i. Stantec GS Inc. is an operating division of Stantec Inc. and has historically focused on meeting the needs of our municipal, state, federal agency, and commercial clients.

Global resources with island attitude • We have a 72-person strong Honolulu operations team with our principal office located in American Savings Bank Tower of Bishop Park, as well as 21 additional staff in the Stantec GS Inc. Honolulu office. Stantec has been working in Hawai'i supporting our community on projects, including working with the Environmental Services Department (ENV) on the Phase 2 Expansion for Sand Island Wastewater Treatment Plant; working with the Office of Climate Change, Sustainability, and Resiliency together with Department of Design and Construction (DDC) on integrating greener and community friendly alternatives into the proposed Ala Wai Flood Mitigation project; construction management for the HART Honolulu Rail Transit Project; harbors master planning for HDOT as a subconsultant; environmental impact assessments for government and commercial clients; mapping for the County of Hawai'i; and risk and resiliency planning for County of Maui. We believe that creating a team that engages the right people is key to project success. Our team offers expertise through our local staff on O'ahu, Maui, and Hawai'i Island, along with relevant support staff and subject matter experts in Western United States—plus all the 32,000+ professionals in our global Stantec network. This gives us the flexibility to respond to any project challenge in a timely and efficient manner to keep your projects on track. We have the diverse experience necessary to tackle even your most unique challenges.

We have approached this submittal in a way that we believe provides the County of Honolulu with information on the depth and breadth of our capabilities, as well as information on specific projects and staff. We understand that in doing this, Section G of this form may not demonstrate the overlap, we would usually present in a direct RFQ. Staff relatively new to Stantec bring a wealth of technical experience and in several cases experience in Hawai'i with other firms. Another important feature of Stantec is our proven track record of integrating multiple disciplines into projects; it's all a part of designing with communities in mind and ensuring projects achieve all potential benefits.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Stantec is a national leader in all aspects of environmental engineering • We integrate this expertise with all of our service areas presented below.

Community Development

- Master Planning
- Urban Design
- Landscape Architecture
- Design Visualization
- Stakeholder Consultation
- Brownfield Redevelopment
- Civil Engineering
- Watershed Studies
- Stormwater Management
- Earthworks Analysis/Lot Grading Design

Flood Control Facilities

- Dams and Levees
- Concrete Lined channels
- Storm Drain networks
- Pumping Stations
- Retention and Outfall structures
- Stormwater Quality and Treatment

Environmental Services

- Assessments, Permitting,
- and Compliance
- Terrestrial and Marine Sensitive Species Surveys
- Ecosystem Mitigation and Restoration
- Archaeology and
- Heritage Resources
- Groundwater Resources
- Management
- Brownfields Assessment
- and Remediation
- Site Investigation and Remediation
- Risk Assessment

Survey/Geomatics

- Boundary and Cadastral Surveys
- Topographic Mapping
- Linear Infrastructure Design
- Wastewater Reclamation and Reuse
- Wet Weather Flow Management
- Construction Stakeout
- Geodetic and Control Surveys
- As-Built Surveys
- 3D Laser Scanning

Geotechnical Engineering

- Subsurface Explorations
- Foundation and Retaining Systems
- Geotechnical Lab Testing
- Materials Investigations
- Seepage Analysis/
- Dewatering Studies
- Slope Stability Analysis
- Settlement Analyses

Water/Wastewater

- Water and Wastewater
- Municipal and Industrial Wastewater Treatment and Water
- Water Supply, Storage Facilities and Distribution Systems
- Pumping Stations
- Trenchless technologies

Transportation Planning and Traffic Engineering

- Transportation Master
- Planning/Modeling
- Travel Forecasting
- Traffic Impact Assessments
- Access Management
- Traffic Calming Solutions
- Safety Assessments

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Stormwater Quality

Redesigning the urban environment to better handle wet weather is more sustainable, less expensive, and easier to manage. That's why we focus on first understanding what a community's existing system can handle, how it can be optimized, what users can afford, and where money is best spent. And with larger storms and more urbanization comes increased flows that bring with them significant flooding and pollution concerns that must be proactively addressed. This is where our experience managing and delivering some of the world's largest stormwater management programs and projects lets us find the best solution for each situation.

Stantec's Water Resources services encompass a wide range of expertise and knowledge, including floodplain delineations; flood control design; bridge hydraulic design; drainage infrastructure design; watershed hydrology; sediment transport analysis; drainage design manuals; training programs; alluvial fan analysis; stormwater management studies; computer modeling; and drainage master plans. Stantec's services also incorporate critical inclusion of client and stakeholder input through public participation. In addition, the development of regulatory and management solutions versus structural alternatives is an expertise of our staff. Projects often include multi-objective components, such as open space habitat and recreation. Public education concerning the multi-objective benefits that water resources play in a community is a key component of our approach and assists our clients by gaining broad-based support for their initiatives.

We provide complete services for stormwater services from conveyance and drainage design to permitting and stormwater quality treatment:

- Blue Green Corridors and Complete Streets
- Flood Modeling
- Hydraulic Modeling
- Asset Management
- Hydraulic Structures
- Pump and Lift Stations
- Stormwater Permitting Assistance (Construction, Industrial, and Commercial Sources)
- Storm Water Pollution Prevention Plans (SWPPPs)
- Site Specific Sediment and Erosion Control Plans
- Inspections and Monitoring
- Best Management Practice (BMP) Design Training
- Nature-based solutions

Blue Green Corridors • The "Living with Water" approach to resilience aims to lessen the burden on the City's stormwater system by introducing green infrastructure practices and strategic storage solutions. By constructing vegetated systems that are capable of managing stormwater runoff, natural elements are used to increase resilience. Stormwater bumpouts and rain gardens are two pieces of green infrastructure that mimic the natural environment, slow stormwater runoff, and allows it to infiltrate back into the ground. Complete Streets is also part of the community-focused project – streets that prioritize safety, comfort, and access for everyone who uses a street: walkers, runners, bikers, and vehicles. It all adds up to a holistic, community-based perspective on resilience. Our stakeholder-centered approach supports communities in reducing flood risk, reducing subsidence, improving the community's quality of life, and encouraging economic growth and social revitalization.

Flood Modeling • Trying to predict the likelihood of a major flood event isn't a new effort—but with an increase in communities experiencing flooding and dealing with the aftereffects, it's more important than ever that we do it better. Stantec has developed Flood Predictor, a secure, cloud-based solution that provides insights into when and where a flooding event is likely to happen. It is powered by data and engineering features, creating a first-of-its-kind methodology that can analyze flood hazards, project future climate scenarios, incorporate local adaptation, and validate against government records. Using machine teaching and learning to provide accurate, data-driven results in near real time, it can help you optimize the way you make decisions. And with risk information delivered in mere seconds, getting ahead of a major flood event just became possible.

Hydraulic Modeling • Stantec has a specialized, integrated team of hydraulic modelers with significant experience in developing, calibrating, testing, and analyzing computer models that simulate the hydraulics of stormwater systems. Our hydraulic modeling team also includes personnel with experience in related specialized fields such as real time control and transient/water hammer modeling. To help ensure we meet our clients' needs, Stantec maintains active license agreements for a variety of hydraulic modeling programs from numerous software providers. We have also integrated the services of our hydraulic modelers in different offices throughout the company in a manner that allows us to collaborate on projects, share access to modeling tools, and exchange ideas all to ensure our clients have access to the expertise and experience of our employees.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

Asset Management • Today, aging infrastructure, increasingly stringent stormwater quality regulatory requirements, flood risk management, water supply reliability, and budgetary and workforce constraints dictate that a new way of stormwater management is needed to optimize business practices. By implementing core asset management processes, stormwater managers can gain knowledge of the assets owned, the remaining useful life to manage, the amount of investment required, and the business risk it faces.

Hydraulic Structures • Hydraulic structures are essential for water management. As challenges continue to arise from environmental issues, aging infrastructure, population growth, and climate change, engineering must evolve towards sustainability. Stantec's experts are designing structures to utilize water resources properly for drinking, agricultural, and industrial use to meet current and future economic, environmental, and social needs.

Our specialized team considers the behavior of water, fluid mechanics, thermodynamics, and weather forecasting to maximize efficient hydraulic structure design—honing in on the form and physical performance of the structures and how they are used.

Stantec extensive hydraulics experience encompasses pipe flow, dam and reservoir design, aqueducts, sewers, water and wastewater treatment, pumps, turbines, hydropower, computational fluid dynamics, flow measurement; river channel, canal, lake, estuaries, and watershed behavior; and erosion. Our modeling experience is a key tool for use in the planning, design, development, and implementation of a variety of infrastructure solutions – from levees and dams to canals, pump stations, detention impoundments and basins, as well as intake, flow diversion, and outlet structures.

Pump and Lift Stations • A major challenge for the planning and design of any new or expanded system is looking toward the future for build-out capacity expansion. Stantec not only uses our experience to implement proven designs, we are pushing the envelope of what is possible—innovating so we can "storm and future-proof" these critical systems. Our integrated team of experts touch all design disciplines including architectural, electrical, instrumentation, mechanical, structural, and construction management.

Stantec is a world leader in hydraulic evaluations. Leveraging this experience, we conduct inspections and condition assessments to help our clients evaluate the reliability, lifecycle, efficiency, and capacity of all pumps and systems; structural and harmonics analysis; hydraulic analysis and CFD modeling; electrical design; liquid/vapor odor control; permitting, architectural, and construction support; address code compliance issues; and resolve operations and maintenance issues.

Permitting and Compliance • Building a strategy for successful permit applications is a team effort. We work with you to prepare permit applications and develop project schedules that keep projects moving forward. Our goal is to obtain essential information to meet regulatory requirements the first time around. Stantec has been supporting municipal and industrial clients for decades with their stormwater permitting and compliance needs. This includes General permits and Individual permits. Stantec stormwater experts are experienced in stormwater treatment design to meet compliance goals emerging from the increased regulatory oversight and focus on specific water body needs and TMDL watersheds. Our team can complete permit applications for state permits necessary for a project and assist in timely approvals and negotiation of permit conditions. Permitting is a time- consuming hurdle that every project needs to clear. Our team has the experience, knowledge, expertise, and relationships to ensure that your project gets off to a smooth, swift start.

Plan Development and BMP Design • From SWPPCP and Site-Specific sediment and erosion control plans to permanent natural treatment systems, Stantec has the planners, engineers, and scientists to prepare design and prepare a plan to suit your needs. For stormwater treatment and BMP design, Stantec's professionals will provide you with a cost effective, sustainable and resilient solution to your stormwater quality needs. Depending on the need and application, our solutions range from conventional structural means to natural treatment systems.

Inspection and Monitoring & Use of Technology • Stantec Qualified SWPPP Practitioner (QSPs), Qualified SWPPP Developer (QSDs) and Qualified Industrial SWPPP Practitioner (QISPs) are fully qualified, trained, and experienced in navigating the SWPPP requirements through the SMARTS program. Additionally, we maintain a robust program for tracking inspections, inspection report preparation and submittal, annual report schedule and other interim reports and documents as required for the specific site/facility and per the permit requirements.

We understand how to effectively make use of new technology to speed up reporting, provide more consistent compliance documents, and reduce overall long-term cost. At Stantec we have used numerous platforms such as our inhouse mTools™ program and external programs Depending on the clients' needs we can provide a recommendation on the best platform to use and how to implement the program. These programs can be customized and used for compliance inspections and reporting for SWPPPs, Hazardous Material Business Plans (HMBP), and Spill Prevention, Control, and Countermeasure (SPCC) Plans created and maintained on an annual basis.

Stantec recommends developing a collaborative environment that leverages mobile technologies to reduce the effort

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

required to capture, generate, monitor, control and collaborate on all aspects of the environmental compliance projects. A cloud hosted framework would allow data/information to be accessed regardless of location and would enable stakeholders to work in parallel and be synchronized with field teams to complete deliverables and project requirements more quickly. Specifically:

- Inspection details, photos with GPS, site conditions and background information will be entered real time in the field.
- Information will be stored on the device including standards and practices to enable off line work and then be uploaded to a project collaboration site.
- Field records auto convert to report templates and prepopulate required reports and project performance dashboards.

Our approach consists of a web-based portal application that displays data dynamically, an enterprise SharePoint/SQL Server database and a workflow engine. The data on the server will be administered internally at Stantec and replicated to the client Portal. Stantec and the client will have access to the hosted portal site through secure a web browser.

Mobile Data Collection • Mobile application allows for pre-population of content to streamline assessments in the field, preconfigured dropdown values to aid in consistent inputs, touchscreen and voice to text capabilities to improve user interface, GPS, photo attachments, and annotation interface.

Inspectors can use iPad or equivalent devices that connect to predefined forms built using SWPPP, HMBP, and/or SPCC Inspection templates provided by Soiland and/or Stantec as needed. AutoForm will function either on or offline, allowing inspectors to complete their work with or without Wi-Fi or cellular connectivity. Once an inspector returns to a Wi-Fi network, all data and corresponding photos are synchronized from the mobile database to an enterprise database (e.g.

SQL Server / SharePoint). Field staff will collect data during the day where it is stored and backed-up on the device. When they re-establish connectivity, (i.e. return to their office, hotel, basecamp, or truck with boosted cellular coverage) they can upload the data they collected that day. If workers are connected continuously, the data can be streamed back to the database using the replication service at any time.

Training • Stantec provides onsite or web-based training that can be customized to fit any client need. Understanding your specific needs is key to developing a cost-effective strategy to maintain compliance. An overall review of your process, staffing, seasonal changes to workflow/staffing, and risk will be completed to determine the best solution and frequency to meet your needs. Stantec can provide face to face training at any frequency required or develop training modules and quizzes to enable in-house training by your staff that is supported with proper training documentation.

Stantec's Stormwater Practice Leads Ed Othmer and John Malueg have been providing site training for construction sites and industrial facilities since the Construction General Permit (CGP) and IGP were first adopted. Training is provided as needed for construction and industrial facilities. CGP training is provided at the beginning of construction activities. IGP training is typically provided for BMP inspection/implementation and stormwater monitoring.

Nature-based solutions • Nature-based solutions (NbS), sometimes referred to as engineering with nature, is a design approach that leverages the positive benefits of natural systems in conjunction with traditional engineering. Weaving natural features and processes into our design work increases long-term human, ecological, and infrastructure resilience to climate change and other environmental impacts.

In the face of warmer global temperatures, increased drought intensity, water quality degradation, biodiversity loss, more severe and frequent storms, flooding, wildfires, sea level rise, and coastal erosion, there's never been a more urgent time for NbS. Why? It plays a vital role in carbon sequestration by supporting the reduction of greenhouse gas emissions (GHG)—helping to mitigate climate change and generate a multiplicity of benefits.

Our comprehensive approach supports communities, industry, and our national security through the integration of NbS, resulting in social, economic, and environmental benefits. Whether the need is a bioswale to mitigate flooding, wetlands to filter storm and wastewater, or a coastal restoration that safeguards infrastructure, Stantec's NbS program has you covered. When it comes to achieving your environmental, social, and governance (ESG), UN Sustainable Development Goals (SDGs), and carbon net zero goals—we bring the needed technical expertise and experience working with communities for holistic, multi-benefit outcomes.

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION AT YOUR DISCRETION. ATTACH ADDITIONAL SHEETS AS NEEDED

On the following pages, we have included SF330 Part II forms for Stantec Consulting Services Inc. and Stantec GS Inc. Honolulu offices as well as other offices that will serve the County of Hawai'i. Additional Part II forms can be provided upon request.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE	32. DATE
	June 30, 2025

33. NAME AND TITLE

Bob Armstrong, PE, Technical Advisor

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2016	YV48PGRUGZN1

2b. STREET	5. OWNERSHIP
1001 Bishop Street, Suite 1501	a. TYPE: **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Honolulu	HI	96813-3429	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Tina Moschetti - Vice President, Transportation	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(559) 492 4164	Tina.Moschetti@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	9
05	Archaeologist	691	0
06	Architect	1335	11
07	Biologist	421	3
08	CAD Technician	1218	1
12	Civil Engineer	4207	9
14	Computer Programmer	1375	1
15	Construction Inspector	350	1
16	Construction Manager	331	9
21	Electrical Engineer	1216	6
23	Environmental Engineer	854	1
24	Environmental Scientist	1764	2
27	Foundation/Geotechnical Engineer	686	0
37	Interior Designer	285	1
38	Land Surveyor	393	2
42	Mechanical Engineer	1360	0
47	Planner, Urban/Regional	956	3
48	Project Manager	2079	10
57	Structural Engineer	1289	2
58	Technician/Analyst	2017	4
	Other Employees	2600	0
	Total	**31644**	**75**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
A06	Airports; Terminals and Hangars; Freight Handling	10
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
C16	Construction Surveying	7
C18	Cost Est, Cost Eng and Analy; Para Costing; Frcst	6
E09	EIS, Assessments of Statements	10
E10	Environmental and Natural Resource Mapping	7
E11	Environmental Planning	10
G04	GIS Services; Devel, Analysis , and Data Collection	6
G05	Geospatial Data Conv: Scan, Digitizing, Comp	5
H01	Harbors; Jetties; Piers, Ship Terminal Facilities	9
H09	Hospital & Medical Facilities	10
I05	Interior Design; Space Planning	8
L02	Land Surveying	9
M05	Military Design Standards	8
R03	Railroad; Rapid Transit	10
R11	Rivers; Canals; Waterways; Flood Control	8
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
S11	Sustainable Design	6
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 27, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	UZJDKEMVLPN8

2b. STREET	5. OWNERSHIP
2999 Oak Road, Suite 800	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Walnut Creek	CA	94597-2054	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Trevor W. Macenski - Senior Principal	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(925) 296-2141	Trevor.Macenski@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Energy & Resources Inc.	2019	11-703-9392

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	28
05	Archaeologist	691	21
06	Architect	1335	2
07	Biologist	421	7
10	Chemical Engineer	455	2
12	Civil Engineer	4207	15
14	Computer Programmer	1375	3
15	Construction Inspector	350	1
16	Construction Manager	331	1
21	Electrical Engineer	1216	12
23	Environmental Engineer	854	5
24	Environmental Scientist	1764	11
27	Foundation/Geotechnical Engineer	686	2
29	GIS Specialist	306	7
30	Geologist	329	11
42	Mechanical Engineer	1360	9
47	Planner, Urban/Regional	956	9
48	Project Manager	2079	11
57	Structural Engineer	1289	4
58	Technician/Analyst	2017	1
	Other Employees	3406	4
	Total	**31644**	**166**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E03	Electrical Studies and Design	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H04	Heating; Ventilating; Air Conditioning	7
H07	Highways; Streets; Airfield Paving; Parking Lots	10
I01	Industrial Building; Manufacturing Plants	10
P02	Petroleum and Fuel (Storage and Distribution)	9
P04	Pipelines (Cross-Country – Liquid & Gas)	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P12	Power Generation, Transmission, Distribution	10
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
U03	Utilities (Gas and Steam)	8
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	GLQQSJ4WRL95

2b. STREET	5. OWNERSHIP
300 North Lake Avenue Suite 400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Pasadena	CA	91101-4169	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Laura Duarte - Office Manager	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(626) 568-6277	laura.duarte@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Energy & Resources Inc.; Stantec Consulting Services Inc. (Cardno, Inc. Glendale CA)	2016; 2022	08-009-4989; 08-029-8919

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	21
05	Archaeologist	691	8
06	Architect	1335	4
07	Biologist	421	3
08	CAD Technician	1218	4
10	Chemical Engineer	455	8
12	Civil Engineer	4207	27
14	Computer Programmer	1375	5
21	Electrical Engineer	1216	5
23	Environmental Engineer	854	8
24	Environmental Scientist	1764	9
27	Foundation/Geotechnical Engineer	686	0
30	Geologist	329	1
34	Hydrologist	251	2
42	Mechanical Engineer	1360	10
47	Planner, Urban/Regional	956	8
48	Project Manager	2079	7
57	Structural Engineer	1289	3
58	Technician/Analyst	2017	0
62	Water Resources Engineer	163	2
	Other Employees	2761	0
	Total	**31644**	**135**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	HAKDPJ5Q18X5

2b. STREET	5. OWNERSHIP
410 17th Street Suite 1400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Denver	CO	80202-4427	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Daniela Machado - Project Management & Commercial Leader, Water	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(303) 291-2274	daniela.machado@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno, Inc.; Stantec Consulting Services Inc. (Denver (S Colorado) CO; Stantec Consulting Services Inc. (Denver (18th St) CO; Stantec Consulting Services Inc. (Denver (Broadway) CO); Stantec Consulting Services Inc. (S Pennsylvania St) Denver, CO); Stantec Consulting Services Inc. (Englewood, CO)	1933; 2009; 2017; 2017; 2021; 2022	NPUPPC7VGKF7; TS2KYRHBKZA3; NUCNR8LGR2Z3; YKQBNN21M3M5; XY59YKA7BE83; NPUPPC7VGKF7

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	172
05	Archaeologist	691	9
06	Architect	1335	52
07	Biologist	421	1
08	CAD Technician	1218	8
10	Chemical Engineer	455	16
12	Civil Engineer	4207	77
14	Computer Programmer	1375	25
15	Construction Inspector	350	3
16	Construction Manager	331	5
21	Electrical Engineer	1216	8
23	Environmental Engineer	854	8
24	Environmental Scientist	1764	12
27	Foundation/Geotechnical Engineer	686	33
30	Geologist	329	7
42	Mechanical Engineer	1360	20
47	Planner, Urban/Regional	956	7
48	Project Manager	2079	33
57	Structural Engineer	1289	27
58	Technician/Analyst	2017	5
	Other Employees	2494	46
	Total	**31644**	**574**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE

June 30, 2025

c. NAME AND TITLE

Sheina Hughes - Vice President, US Mountain Regional Leader

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	ET2NUL57AEH9

2b. STREET	5. OWNERSHIP
601 SW Second Avenue Suite 1400	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Portland	OR	97204-3128	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Luke De Hayr - Executive Vice President, Environmental Services	**Stantec Inc.**

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS
(503) 419-2632	luke.dehayr@stantec.com

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Cardno, Inc.; Stantec Consulting Services Inc. (Barnes Rd, Portland, OR); Stantec Consulting Services Inc. (Macadam Ave Portland OR)	1933; 2009; 2022	13-959-8010; 13-020-0319; VQEBAKYJ4VQ

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	26
05	Archaeologist	691	12
06	Architect	1335	5
07	Biologist	421	4
08	CAD Technician	1218	4
10	Chemical Engineer	455	3
12	Civil Engineer	4207	26
14	Computer Programmer	1375	12
15	Construction Inspector	350	9
16	Construction Manager	331	12
21	Electrical Engineer	1216	10
23	Environmental Engineer	854	4
24	Environmental Scientist	1764	7
27	Foundation/Geotechnical Engineer	686	4
38	Land Surveyor	393	1
42	Mechanical Engineer	1360	5
47	Planner, Urban/Regional	956	8
48	Project Manager	2079	22
57	Structural Engineer	1289	4
58	Technician/Analyst	2017	1
	Other Employees	2430	16
	Total	**31644**	**195**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1.	Less than $100,000	6.	$2 million to less than $5 million
2.	$100,000 to less than $250,000	7.	$5 million to less than $10 million
3.	$250,000 to less than $500,000	8.	$10 million to less than $25 million
4.	$500,000 to less than $1 million	9.	$25 million to less than $50 million
5.	$1 million to less than $2 million	10.	$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
	**June 30, 2025**

c. NAME AND TITLE

Sheina Hughes - Vice President, US Mountain Regional Leader

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc.	2017	T7A9LQQMSBE9

2b. STREET	5. OWNERSHIP
2890 East Cottonwood Parkway Suite 300	a. TYPE **Corporation**

2c. CITY	2d. STATE	2e. ZIP CODE	b. SMALL BUSINESS STATUS
Salt Lake City	UT	84121-7283	**N/A**

6a. POINT OF CONTACT NAME AND TITLE	7. NAME OF FIRM *(If block 2a is a branch office)*
Damon Brown - Senior Principal, Business Center Operations Leader	

6b. TELEPHONE NUMBER	6c. EMAIL ADDRESS	
(801) 743-4811	Damon.Brown@stantec.com	**Stantec Inc.**

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Services Inc. (W 200 S, SLC, UT); Stantec Consulting Services Inc. (S 700 E, SLC, UT); Stantec Consulting Services Inc. (Cardno, Inc. West Valley City UT)	2009; 2017; 2022	08-123-7600; 15-787-2641; 61-007-3608

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	21
05	Archaeologist	691	4
07	Biologist	421	3
08	CAD Technician	1218	2
10	Chemical Engineer	455	2
12	Civil Engineer	4207	11
14	Computer Programmer	1375	4
15	Construction Inspector	350	1
21	Electrical Engineer	1216	3
23	Environmental Engineer	854	5
24	Environmental Scientist	1764	12
27	Foundation/Geotechnical Engineer	686	1
29	GIS Specialist	306	2
30	Geologist	329	7
34	Hydrologist	251	7
42	Mechanical Engineer	1360	8
47	Planner, Urban/Regional	956	1
48	Project Manager	2079	26
57	Structural Engineer	1289	2
58	Technician/Analyst	2017	4
	Other Employees	3603	6
	Total	**31644**	**132**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
C13	Computer Facilities; Computer Service	7
C15	Construction Management	10
D01	Dams (Concrete; Arch)	9
E07	Energy Conservation; New Energy Sources	8
E09	EIS, Assessments of Statements	10
E12	Environmental Remediation	10
E13	Environmental Testing and Analysis	9
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H12	Hydraulics & Pneumatics	5
I01	Industrial Building; Manufacturing Plants	10
P05	Planning (Comm., Regional, Areawide , and State)	9
P06	Planning (Site, Installation, and Project)	10
P12	Power Generation, Transmission, Distribution	10
R10	Risk Analysis	7
S04	Sewage Collection, Treatment, and Disposal	10
S07	Solid Wastes; Incineration; Landfill	8
S13	Storm Water Handling & Facilities	9
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE	b. DATE
Sarah McIlroy	**June 30, 2025**

c. NAME AND TITLE

Sarah A. McIlroy - Vice President, US Pacific

ARCHITECT - ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME	3. YEAR ESTABLISHED	4. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Ltd./Stantec Experts-conseils ltée	2003	UZKEHN3JMV49

2b. STREET	5. OWNERSHIP
200-325 25th Street SE	a. TYPE: **Corporation**
2c. CITY: Calgary / 2d. STATE: AB / 2e. ZIP CODE: T2A 7H8	b. SMALL BUSINESS STATUS: **N/A**
6a. POINT OF CONTACT NAME AND TITLE: Anna Kozicky - Director of Business Development, Energy & Resources	7. NAME OF FIRM *(If block 2a is a branch office)*: **Stantec Inc.**
6b. TELEPHONE NUMBER: (403) 781-4134 / 6c. EMAIL ADDRESS: Anna.Kozicky@stantec.com	

8a. FORMER FIRM NAME(S) *(If any)*	8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Stantec Consulting Ltd. (9th Ave., Calgary); Stantec Consulting Ltd. (Railway, Calgary)	2015; 2024	N/A; N/A

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. No. of Employees (1) Firm	c. No. of Employees (2) Branch
02	Administrative	6217	347
05	Archaeologist	691	34
06	Architect	1335	35
07	Biologist	421	23
08	CAD Technician	1218	55
10	Chemical Engineer	455	11
12	Civil Engineer	4207	97
14	Computer Programmer	1375	58
16	Construction Manager	331	30
21	Electrical Engineer	1216	46
23	Environmental Engineer	854	14
24	Environmental Scientist	1764	97
27	Foundation/Geotechnical Engineer	686	54
30	Geologist	329	17
38	Land Surveyor	393	24
42	Mechanical Engineer	1360	32
47	Planner, Urban/Regional	956	15
48	Project Manager	2079	74
57	Structural Engineer	1289	29
58	Technician/Analyst	2017	205
	Other Employees	2451	142
	Total	**31644**	**1439**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number *(See Below)*
B02	Bridges	10
C10	Commercial Building (low rise); Shopping Centers	10
C15	Construction Management	10
D04	Design-Build; Preparation of RFPs	9
E02	Educational Facilities; Classrooms	10
E09	EIS, Assessments of Statements	10
E11	Environmental Planning	10
E12	Environmental Remediation	10
H07	Highways; Streets; Airfield Paving; Parking Lots	10
H09	Hospital & Medical Facilities	10
H11	Housing (Residential, Multi-Family, Apts, Condos)	10
I01	Industrial Building; Manufacturing Plants	10
M06	Mining & Mineralogy	10
P04	Pipelines (Cross-Country – Liquid & Gas)	10
P12	Power Generation, Transmission, Distribution	10
R03	Railroad; Rapid Transit	10
S04	Sewage Collection, Treatment, and Disposal	10
S10	Surveying; Platting; Mapping; Flood Plain Studies	7
T03	Traffic & Transportation Engineering	10
U02	Urban Renewals; Community Development	10
W02	Water Resources; Hydrology; Ground Water	10
W03	Water Supply; Treatment , and Distribution	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

(insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	**10**

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000
2. $100,000 to less than $250,000
3. $250,000 to less than $500,000
4. $500,000 to less than $1 million
5. $1 million to less than $2 million
6. $2 million to less than $5 million
7. $5 million to less than $10 million
8. $10 million to less than $25 million
9. $25 million to less than $50 million
10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE

b. DATE: **June 30, 2025**

c. NAME AND TITLE: **Scott Argent - Vice President, Alberta North**