B. Scope of Services

Table 2 outlines the services our multidisciplinary team can provide to support the Noyo Harbor planning effort. The Dudek team can support most service areas listed in the Scope of Services section of the RFQ. The only exceptions are items No. 8, Economic Analyses, and No. 20, Traditional Ecological Knowledge.

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
1. Surveying and mapping, including lidar, CAD and/or GIS	▪ In-house team of experienced licensed land surveyors based in California ▪ Surveying specialties include topo design surveys, boundary and ALTA surveys, bathymetric surveys, easement plotting/design (legal description/plat maps), terrestrial lidar scanning, AutoCAD drafting and Civil 3D Surfaces ▪ Mapping services specializing in UAV aerial imagery, lidar, multispectral collection, site planimetric feature drafting ▪ Web-based mapping solutions including the Esri suite of online tools and software	▪ Community mapping for public events and workshops ▪ Mapping to support plan development ▪ Evaluation of existing Noyo Harbor conditions, including topography and bathymetry ▪ Creation of "digital twin" of Noyo Harbor environment utilizing hybrid approach of terrestrial lidar and UAV lidar/imagery ▪ Ability to view all survey data within the web-Based Esri software, enabling a wide variety of interested parties to view data without any software download requirements
2. Civil and hydrological engineering	▪ Team of experienced civil engineers, hydrologists, and geomorphologists in California ▪ Experience in hydrologic assessment and modeling, channel and storm drain hydraulic modeling incorporating tidal influences, stormwater management and infrastructure design, site development and design, water/wastewater infrastructure assessment/rehabilitation/design	▪ Experience identifying opportunities and limitations for proposed developments and infrastructure needs via expertise in storm-, potable-, recycled-, and wastewater ▪ Experience incorporating tidal influences into storm drain and surface water modeling
3. Habitat restoration design, permitting, construction, and monitoring for integrated habitats and multiple benefits	▪ Team of environmental landscape architects, botanists, biologists, environmental planners, permitting specialists, and restoration construction specialists ▪ Ability to synthesize a broad array of data; design projects that take advantage of natural processes and balance environmental, equity, and economic considerations; and monitor projects to evaluate success	▪ Experience collecting baseline technical information to understand opportunities and constraints and translate understanding to climate ready projects ▪ Expertise coordinating with resource agencies and processing permits for multi-benefit, restoration projects

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
4. Natural and nature-based shoreline protection design	▪ Siting, designing, and implementing nature-based adaptation projects ▪ Thoughtful design and monitoring plans to support permitting	▪ Experience with design, implementation, and monitoring within regulatory environment ▪ Prioritization of phased strategies and emphasis of concept design and alternative development approaches that integrate a functional landscape approach
5. Water quality assessment	▪ Team of engineers, hydrologists, biologists, and wetland scientists ▪ Expertise preparing application packages and required documentation to obtain state and/or federal permits, including Section 404 and 401 Permits ▪ Expertise in developing/implementing long-term water quality monitoring programs evaluating seasonal fluctuations in pollutant concentrations and suitability of water quality conditions for providing habitat for aquatic species at various life stages	▪ Evaluation of existing and potential water quality conditions for proposed Noyo Harbor projects following the state's Surface Water Ambient Monitoring Program protocol (e.g., aquaculture, pathogens [per FDA] and TMDLs levels [per RWQCB]) ▪ Possible development and implementation of a bivalve bioaccumulation study ▪ Coordination of laboratory analyses with any number of labs certified through California's Environmental Laboratory Accreditation Program (ELAP) that either Dudek or the City have established agreements with ▪ Design of water quality monitoring programs
6. Structural analyses	▪ Team of licensed professional civil engineers with structural engineering experience, specifically in harbors and other waterfront structures ▪ Key project experience includes design of bulkheads, levees, dock systems, piers, revetments, piles and other foundations, and all related steel, concrete, and wood structural members and components	▪ Assessment of structural integrity of the harbor's shoreline structures ▪ Determination of feasible structural solutions for enhancing coastal resilience ▪ Interpretation of coastal hazards and sea level rise impacts to structures

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
7. Pre-project feasibility analyses	▪ Team of uniquely experienced planners and regulatory permit experts with specific aquaculture and other blue economy experience ▪ Have worked closely with UCSB Brenn School and NOAA NCCOS on spatial modelling for diving locations suitable for aquaculture within specific regions (Ventura and San Diego) ▪ Have developed/conducted numerous feasibility studies for aquatic species/wetland features incorporating Dudek's diverse range of expertise to identify major constraints including, but not limited to, hazards assessments, cultural surveys, biological surveys, hydrology and water quality studies, wildfire studies, and evaluation of anticipated climate change impacts	▪ Determination of aquaculture feasibility by working with engineering conditions assessments of existing infrastructure, economists, and studies underway by the City, California Sea Grant, and the Noyo Center for Marine Science ▪ Performance of water quality analyses to evaluate suitability of proposed aquaculture (i.e., oysters, kelp, sunflower sea stars, etc.) ▪ Assessment of suitable characteristics for potential species in water and opportunities for facilities on land, as well as Floating Upweller System (FLUPSY) similar to that piloted in San Diego Bay.
9. Hazardous or toxic substance investigations	▪ Credentialed environmental engineers, geologists, hydrologists, and permitting specialists ▪ Experience with ESAs, site investigations, remediation activities, regulatory permitting and compliance, and regulatory closure for numerous sites	▪ Thorough environmental site assessments identifying historical, existing, and potential sources of pollutants that could impact proposed Noyo Harbor projects and/or require significant remediation ▪ Remediation programs (soil, soil vapor, groundwater, and water) to address issues associated with hazardous or toxic substances
10. Watershed, intertidal, and subtidal assessments	▪ Watershed specialists, including hydrologists, geomorphologists, water and forest resiliency planners, and GIS analysts who conduct various levels of watershed assessments supporting management of supply, water quality, habitat, and flooding ▪ Team of marine biologists that conduct marine habitat assessments, including underwater dive assessments on hard- and soft-bottom habitats within the nearshore throughout California	▪ Characterization of existing and model-projected watershed, intertidal, and subtidal conditions supporting and/or inhibiting possible Noyo Harbor projects ▪ Collection of baseline information on existing marine conditions to support blue economy initiatives while protecting and enhancing marine habitats
11. Archaeological studies	▪ Team of archaeologists, architectural historians, historians, ethnographers, and paleontologists	▪ Collection of appropriate existing-conditions information for Noyo Harbor to support planning process

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
	▪ Experienced in identification, significance assessment, mitigation, and preservation	
12. Climate change issues such as species migrations, seasonal coastal and fluvial flooding, and sea-level rise	▪ Diverse team of climate change specialists familiar with hazards such as ocean acidification, increased fluvial flooding, and sea level rise ▪ Experienced in helping communities adapt through community engagement and visioning, which drive policy changes and project implementation	▪ Ability to synthesize site-specific climate hazard analysis ▪ Ability to identify infrastructure and community needs and recommend adaptation pathways for resilient harbor
13. Botanical studies	▪ Team of botanists with wide-ranging botanical expertise and deep ecological restoration knowledge ▪ Ability to identify, describe, classify, and assess vegetation communities and habitat types, environmental conditions, and the potential for special-status species to occur in identified habitats	▪ Collection of appropriate existing-conditions information for Noyo Harbor to support planning process.
14. Agricultural Studies (Aquaculture Studies)*	▪ See scope items No. 5 and No. 7 above ▪ Team of marine biologists and water quality specialists with experience in evaluating suitability of habitat for aquaculture and developing long-term water quality monitoring studies characterizing suitability of habitat for aquatic flora and fauna	▪ See scope items No. 5 and No. 7 above ▪ Performance of anticipated studies for oysters, kelp, and/or star fish, which will require an understanding of the best-available science (e.g., FDA's assessment of human health hazards with shellfish) for conducting water quality and bioaccumulation analyses ▪ Incorporation of input from interested parties and outside entities invested in this region
15. Soil and marine sediment analyses	▪ Team of environmental engineers and geologists with experience in developing soil sampling programs for identifying and quantifying impacted substrate	▪ Identification of impacted soils for both projects on land and in the harbor to support feasibility assessments and/or determine level of remediation. ▪ Coordination of laboratory analyses to be with any number of labs certified through California's Environmental Laboratory Accreditation Program (ELAP) that either Dudek or the City have established agreements with
16. Site and land use planning	▪ Team of urban designers, coastal planners, and regulatory experts including ex-agency staff (e.g., USACE, CCC, PoSD, et al.)	▪ Native Spanish speakers to assist with community outreach and engagement

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
	▪ Practical, implementation-focused plans that offer a platform for real change	▪ Former California Coastal Commission staff who can provide guidance on updates to the City's LCPA
17. Sea-level rise and coastal erosion modeling	▪ Team of engineers, coastal scientists, and GIS specialists ▪ Model animations and graphics to communicate coastal hazard pathways and impacts	▪ Two-dimensional tidal and fluvial modeling to identify pathways of inundation, depth, and duration ▪ Ability to inform and prioritize adaptation projects
18. Environmental monitoring	▪ Team of engineers, hydrologists, biologists, and wetland scientists that provide comprehensive environmental monitoring and compliance services ▪ Expertise in developing/implementing long-term water quality monitoring programs, as described under scope item No. 5 above	▪ Support of project feasibility assessment, implementation, and operations, as necessary
19. Graphic design for educational materials	▪ Team of graphic designers and visual storytellers ▪ Powerful products that communicate complex information through graphics, audio/visual, and printed materials (see Appendix B)	▪ Design of materials that promote community engagement ▪ Production of a high-quality plan that translates technical subjects simply and effectively
21. Local working waterfront skills	▪ Expertise in projects and locations with working waterfronts and assessment of current and proposed uses of waterfront space	▪ Data gathering and assessment of historical and current use of waterfront space at Noyo Harbor
22. Harbor District and Special District Analysis	▪ Team of environmental specialists and coastal planners with experience in visionary plan development and Master Plan amendments ▪ In-depth understanding of the complex issues and rigorous environmental requirements involved in port and harbor projects	▪ Evaluation of City's and partnering and/or adjacent agencies' authority and geographical limits, as well as opportunities for revisions thereto and additional agency approvals needed for such ▪ Evaluation of the leasing authorities, policies, and regulations that may affect aquaculture leasing, specifically for in-water activities

Table 2. Dudek Services

Requested Service	Dudek Team Capabilities and Qualifications	Relevance to Grant and Contract
23. Other related environmental services, such as appraisals for restoration purposes	▪ Team of environmental specialists that provide comprehensive environmental services throughout California at numerous harbor, bay, and coastal locations ▪ CEQA and NEPA review, coastal permitting (CDPs/CDs), USCG PATON, USACE permits (s10 R&HA and 404 CWA) RWQCB CWA permits, and habitat restoration, among other services ▪ Extensive site assessments performed in evaluating a site's suitability for restoration ▪ Ability to examine a site's potential value as a restoration project by estimating the costs to plan, implement, and monitor a site	▪ Ability to help the City discern information gaps, documentation needs, permitting, and comprehensive considerations for plan success through our deep bench of multiprogram-literate professionals ▪ Ability to gather appropriate existing-conditions information for Noyo Harbor to support planning process ▪ If plan implementation requires restoration, ability to review and assess site suitability for restoration

Note:

* Per the RFQ Response to Written Questions, the intent is that this item relates to aquaculture studies, not agricultural studies.

Budget and Schedule of Charges

Figure 2 lists Dudek's proposed lead personnel and their rates. Figure 3 details Dudek's 2024 schedule of charges, which includes all personnel rates, travel costs, and other fees. Figure 4 details GHD's schedule of charges.

Name and Role	Hourly Rate
Project Manager, Ann Sansevero, AICP	$300
Coastal Planning Lead, Sarah Richmond, PG	$210
Coastal Engineering Lead, Patrick Miskel, PE	$260
Biological Resources Lead, Mike Henry, PhD	$300
Aquaculture Lead, Matthew Valerio	$300
Climate Change Lead, Rose Newberry, AICP, WEDG	$210
Land Use Planning Lead, Carolyn Groves, AICP	$185
Hydrology and Water Quality Lead, Jonathan Martin	$265
Civil and Hydrological Engineering Lead, Josh Cato, PE, CFM	$250
Structural Engineering Lead, Satish Chilka, PE (GHD)	$320
Nature-Based Shoreline Design Lead, Brian Leslie (GHD)	$290
Sea Level Rise Modeling Lead, Brett Vivyan, PE, QSD/P (GHD)	$270
Mapping and Surveying Lead, Dustin Gaessner	$220
Permitting Lead, Laurie Monarres	$285
Hazardous Materials Lead, Glenna McMahon, PE	$310
Environmental Planning Lead, Catherine Wade, PhD	$210
Archaeological and Built Environment Studies Lead, Ryan Brady, RPA	$210
Habitat Restoration Lead, Mike Sweesy, RLA, CERP	$330
Community Engagement Lead, Jane Gray	$285
Graphic Design Lead, Raoul Rañoa	$175

Figure 3. Dudek Schedule of Charges

DUDEK 2024 Standard Schedule of Charges

Engineering Services

Project Director	$335.00/hr
Principal Engineer III	$310.00/hr
Principal Engineer II	$290.00/hr
Principal Engineer I	$280.00/hr
Program Manager	$265.00/hr
Senior Project Manager	$265.00/hr
Project Manager	$255.00/hr
Senior Engineer III	$250.00/hr
Senior Engineer II	$240.00/hr
Senior Engineer I	$230.00/hr
Project Engineer IV/Technician IV	$220.00/hr
Project Engineer III/Technician III	$210.00/hr
Project Engineer II/Technician II	$200.00/hr
Project Engineer I/Technician I	$180.00/hr
3D Production Manager	$210.00/hr
Senior Designer II	$200.00/hr
Senior Designer I	$195.00/hr
Designer	$185.00/hr
Assistant Designer	$180.00/hr
CADD Operator III	$175.00/hr
CADD Operator II	$165.00/hr
CADD Operator I	$145.00/hr
CADD Drafter	$130.00/hr
CADD Technician	$120.00/hr
Project Coordinator	$155.00/hr
Engineering Assistant	$125.00/hr

Environmental Services

Senior Project Director	$330.00/hr
Project Director	$285.00/hr
Senior Specialist V	$260.00/hr
Senior Specialist IV	$245.00/hr
Senior Specialist III	$235.00/hr
Senior Specialist II	$225.00/hr
Senior Specialist I	$210.00/hr
Specialist V	$195.00/hr
Specialist IV	$185.00/hr
Specialist III	$175.00/hr
Specialist II	$165.00/hr
Specialist I	$145.00/hr
Analyst V	$145.00/hr
Analyst IV	$135.00/hr
Analyst III	$125.00/hr
Analyst II	$115.00/hr
Analyst I	$105.00/hr
Technician III	$90.00/hr
Technician II	$80.00/hr
Technician I	$70.00/hr

Mapping and Surveying Services

Application Developer II	$220.00/hr
Application Developer I	$155.00/hr
GIS Analyst V	$205.00/hr
GIS Analyst IV	$170.00/hr
GIS Analyst III	$150.00/hr
GIS Analyst II	$135.00/hr
GIS Analyst I	$125.00/hr
UAS Pilot	$145.00/hr
Survey Lead	$235.00/hr
Survey Manager	$210.00/hr
Survey Crew Chief	$165.00/hr
Survey Rod Person	$95.00/hr
Survey Mapping Technician	$95.00/hr

Construction Management Services

Principal/Manager	$195.00/hr
Senior Construction Manager	$185.00/hr
Senior Project Manager	$180.00/hr
Construction Manager	$175.00/hr
Project Manager	$170.00/hr
Resident Engineer	$175.00/hr
Construction Engineer	$170.00/hr
On-site Owner's Representative	$160.00/hr
Prevailing Wage Inspector	$155.00/hr
Construction Inspector	$145.00/hr
Administrator/Labor Compliance	$120.00/hr

Hydrogeology/HazWaste Services

Project Director	$335.00/hr
Principal Hydrogeologist/Engineer III	$310.00/hr
Principal Hydrogeologist/Engineer II	$300.00/hr
Principal Hydrogeologist/Engineer I	$290.00/hr
Senior Hydrogeologist V/Engineer V	$265.00/hr
Senior Hydrogeologist IV/Engineer IV	$255.00/hr
Senior Hydrogeologist III/Engineer III	$245.00/hr
Senior Hydrogeologist II/Engineer II	$235.00/hr
Senior Hydrogeologist I/Engineer I	$225.00/hr
Project Hydrogeologist V/Engineer V	$215.00/hr
Project Hydrogeologist IV/Engineer IV	$205.00/hr
Project Hydrogeologist III/Engineer III	$195.00/hr
Project Hydrogeologist II/Engineer II	$185.00/hr
Project Hydrogeologist I/Engineer I	$175.00/hr
Hydrogeologist/Engineering Assistant	$140.00/hr
HazMat Field Technician	$125.00/hr

District Management & Operations

District General Manager	$225.00/hr
District Engineer	$215.00/hr
Operations Manager	$165.00/hr
District Secretary/Accountant	$140.00/hr
Collections System Manager	$140.00/hr
Grade V Operator	$130.00/hr
Grade IV Operator	$115.00/hr
Grade III Operator	$105.00/hr
Grade II Operator	$85.00/hr
Grade I Operator	$80.00/hr
Operator in Training	$75.00/hr
Collection Maintenance Worker	$75.00/hr

Creative Services

Creative Services IV	$165.00/hr
Creative Services III	$150.00/hr
Creative Services II	$135.00/hr
Creative Services I	$120.00/hr

Publications Services

Technical Editor IV	$165.00/hr
Technical Editor III	$150.00/hr
Technical Editor II	$135.00/hr
Technical Editor I	$120.00/hr
Publications Specialist IV	$125.00/hr
Publications Specialist III	$115.00/hr
Publications Specialist II	$105.00/hr
Publications Specialist I	$95.00/hr
Clerical Administration	$90.00/hr

Expert Witness – Court appearances, depositions, and interrogatories as expert witness will be billed at 2.00 times normal rates.
Emergency and Holidays – Minimum charge of two hours will be billed at 1.75 times the normal rate.
Material and Outside Services – Subcontractors, rental of special equipment, special reproductions and blueprinting, outside data processing and computer services, etc., are charged at 1.15 times the direct cost.
Travel Expenses – Mileage at current IRS allowable rates. Per diem where overnight stay is involved is charged at cost
Invoices, Late Charges – All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within 30 days from the date of the invoice. Client agrees to pay a monthly late charge equal to 1% per month of the outstanding balance until paid in full.
Annual Increases – Unless identified otherwise, these standard rates will increase in line with the CPI-U for the nearest urban area per the Department of Labor Statistics to where the work is being completed) or by 3% annually, whichever is higher.

The rates listed above assume prevailing wage rates does not apply. If this assumption is incorrect Dudek reserves the right to adjust its rates accordingly.

DUDEK

EFFECTIVE JANUARY 1, 2024