



**DOWNEY**  
engineering corporation

Naval Architecture • Structural Engineering • Project Management

One Galleria Boulevard, Suite 907  
Metairie, LA 70001  
Phone: (504) 818-0377 Fax: (504) 818-0447  
Louisiana Registered Engineering Firm C-1909  
www.downeyengineering.com

Contract Number: GS-10F-0243W  
Business Size: Small  
Federal Supply Group: 871  
Contract Period: 7/1/10 - 6/30/20



**GENERAL SERVICES ADMINISTRATION  
AUTHORIZED FEDERAL SUPPLY SCHEDULE PRICELIST  
PROFESSIONAL ENGINEERING SERVICES**

**PRIMARY ENGINEERING DISCIPLINES  
AWARDED UNDER THIS CONTRACT**

Civil, Electrical, and Mechanical

- 871-1 Strategic Planning for Technology Programs/Activities
- 871-2 Concept Development and Requirements Analysis
- 871-3 System Design, Engineering, and Integration

Military Projects



On-line access to contract ordering information, terms and conditions, up-to-date pricing, and option to create an electronic delivery order are available on GSA Advantage via the Internet at <http://www.gsaadvantage.gov>.

Point of Contact for Ordering: E. J. Downey, P.E.  
Downey Engineering Corporation

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## ABOUT DOWNEY ENGINEERING CORPORATION

Founded in 1994, Downey Engineering Corporation (DEC) is a full-service marine consulting firm established to provide naval architecture, structural design and analysis, drafting, and project management services. Our reputation for exceptional customer service has helped expand our client base to include both domestic and international customers serving the commercial, military, and government segments of the marine industry.

Our military customers include both the US Navy and the US Coast Guard and projects for foreign military sales. DEC has design experience in steel, aluminum, and composite materials. The diversity of DEC's capabilities and experience positions the company to be well suited for design and analysis associated with both new construction and conversion projects.

Our principal capabilities are as follows:

- Naval Architecture & Marine Engineering
- Structural Design & Analysis
- Finite Element Analysis
- Shock Analysis
- Vibration Analysis
- Fatigue Analysis
- Conceptual Designs
- Functional Designs
- Production Level Drawings
- Part Nesting & Creation
- Production Field Support
- Computational Fluid Dynamics

## Section 1 – Customer Information

Point of contact for ordering:

E. J. Downey, P.E.  
1 Galleria Boulevard, Suite 907  
Metairie, LA 70001  
504-818-0377 ext 33  
504-554-0322 cell  
E-mail: ejdowney@downeyengineering.com

Contract Administrator:

Martha Bradley  
E-mail: mlbradley@downeyengineering.com

### 1a. Awarded Special Item Numbers (SINs)

This Contract covers the following SINs which include Recovery Purchasing (RC).

871-1 Strategic Planning for Technology Programs/Activities

871-1 RC Strategic Planning for Technology Programs/Activity

871-2 Concept Development and Requirements Analysis

871-2 RC Concept Development and Requirements Analysis

871-3 System Design, Engineering, and Integration

871-3 RC System Design, Engineering, and Integration

The engineering disciplines covered in this contract are:

Civil, Electrical, and Mechanical Engineering

**1b. Identification of the lowest price:** The proposed pricing structure is consistent with the firm's commercial practices and is described in Section 3 of this schedule.

**1c. Contractor hourly rates:** A description of all corresponding commercial job titles, experience, functional responsibility and education for employees or subcontractors who will perform services is described in Section 4 of this schedule.

2. **Maximum order:** \$1,000,000.00.
3. **Minimum order:** \$100.00.
4. **Geographic coverage (delivery area):** Domestic only.
5. **Point(s) of production:** Downey Engineering Corporation, 1 Galleria Boulevard, Suite 907, Metairie, LA 70001.
6. **Discount from list prices or statement of net price:** Government net prices (discounts already deducted). See Section 3.
7. **Quantity discounts:** None offered.
8. **Prompt payment terms:** Net 30 days.
- 9a. **Notification that Government purchase cards are accepted up to the micro-purchase threshold:** Downey Engineering Corporation will accept Government purchase cards up to the micro-purchase threshold.
- 9b. **Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold:** Downey Engineering Corporation will accept Government purchase cards over \$3,000.
10. **Foreign items (list items by country of origin):** None.
- 11a. **Time of delivery:** Specified on the task order.
- 11b. **Expedited delivery:** Contact Contractor.
- 11c. **Overnight and 2-day delivery:** Contact Contractor.
- 11d. **Urgent requirements:** Contact Contractor.
12. **F.O.B. Point(s):** Destination.
- 13a. **Ordering address:** Downey Engineering Corporation, 1 Galleria Boulevard, Suite 907, Metairie, LA 70001.
- 13b. **Ordering procedures:** For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's), and a

- sample BPA can be found at the GSA/FSS homepage (fss.gsa.gov/schedules).
14. **Payment address:** Downey Engineering Corporation, 1 Galleria Boulevard, Suite 907, Metairie, LA 70001.
  15. **Warranty provision:** For purposes of this contract, warranties will be negotiated for each delivery.
  16. **Export Packing Charges (if applicable):** N/A
  17. **Terms and conditions of Government Purchase Card acceptance (any thresholds above the micro-purchase level):** Contact Contractor.
  18. **Terms and conditions of rental, maintenance, and repair (if applicable):** N/A
  19. **Terms and conditions of installation (if applicable):** N/A
  20. **Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable):** N/A
  - 20a. **Terms and conditions for any other services (if applicable):** N/A
  21. **List of services and distribution points (if applicable):** N/A
  22. **List of participating dealers (if applicable):** N/A
  23. **Preventive maintenance (if applicable):** N/A
  - 24a. **Environmental attributes, e.g., recycled content, energy efficiency and/or reduced pollutants:** N/A
  - 24b. **If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor's website or other location.) The EIT standards can be found at: [www.Section508.gov/](http://www.Section508.gov/).**
  25. **Data Universal Numbering System (DUNS) number:** 92-8810522.
  26. **Notification regarding registration in System for Award Management (SAM) database:** Registered.

## Section 2 – Description of Services

### **SIN 871-1:** Strategic Planning for Technology Programs/Activities

Define and interpret high-level organizational engineering performance requirements and the objectives and approaches to their achievement. Tasks include:

- Analysis of mission or program goals and objectives
- Requirements analysis
- Organizational performance assessment
- Special studies and analysis
- Training and consulting

### **SIN 871-2:** Concept Development and Requirements Analysis

Conduct abstract or concept studies that evaluate alternative technical approaches and associated costs for the development of enhancement of high level performance specifications of a system, project, mission, or activity. Tasks include:

- Requirements analysis
- Cost and cost performance trade-off analysis
- Regulator compliance support
- Technology and system conceptual design
- Training and consulting

### **SIN 872-3:** System Design, Engineering, and Integration

Translate a system concept into a preliminary and detailed design and integrate the various components to produce a model of the system. Tasks include:

- Computer-aided design
- Design studies and analysis
- High-level detailed specification preparation
- Configuration, management, and document control
- Fabrication, assembly, and simulation modeling
- Training and consulting

### Section 3 – Price List (2010)

Labor Category	Hourly Price Offered (including IFF)
Principal	\$151.13
Project Engineer	\$ 99.74
Senior Engineer	\$ 85.64
Senior Naval Architect	\$ 85.64
Engineer	\$ 75.56
Naval Architect	\$ 75.56
Designer **	\$ 65.49
Administrative **	\$ 45.34

SCA Eligible Contract Labor Category	SCA Equivalent Code Title	WD Number
Administrative	01020 – Administrative Assistant	052233
Designer	30063 – Drafter/CAD Operator III	052233

The Service Contract Act (SCA) is applicable to this contract, and it includes SCA applicable labor categories. The prices for the indicated (\*\*) SCA labor categories are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCA matrix. The prices offered are based on the preponderance of where work is performed and should the contractor perform in an area with lower SCA rates, resulting in lower wages being paid, the task order prices will be discounted accordingly.

**SECTION 4 - LABOR CATEGORY DESCRIPTIONS**

<b>Labor Categories</b>	<b>Minimum/ General Experience and Years of Experience</b>	<b>Functional Responsibility</b>	<b>Educational Requirements</b>
Principal	Minimum 25 years experience in engineering.	Significant ownership in the company. Minimum of twenty-five years experience as an engineer with escalating job responsibilities in project size and engineering complexity. Significant company responsibility including P & L responsibility, company policy and procedures, human resources and marketing. As an engineer the Principal shall have accumulated significant professional experience in marine construction, ship repair, marine regulations and class rules, and ship design.	Bachelor's Degree in engineering from an accredited university plus appropriate continuing education. Registered Professional Engineer.
Project Engineer	Minimum of 10 years experience in naval architecture, marine engineering, engineering analysis or project management.	Guides engineers, naval architects and designers in formulating requirements with respect to project cost schedule and resources. Conducts analyses and feasibility studies. Regularly functions as the Project Engineer for major projects.	Bachelor's Degree in engineering from an accredited university plus appropriate continuing education. Registered Professional Engineer.
Senior Engineer	Minimum of 5 years experience in general engineering technologies.	Minimum of five years experience as an engineer with escalating job responsibilities in project size and engineering complexity. Senior Engineer shall have accumulated significant professional experience in marine construction, ship repair, marine regulations and class rules, and ship design. The Senior Engineer is experienced in engineering analysis software to solve problems associated with stress, shock, vibration, materials and marine engineering.	Bachelor's Degree in Engineering. Eligible to sit for Professional Engineering Exam.
Senior Naval Architect	Minimum of 5 years experience in design and analysis of marine vessels.	Minimum of five years experience as a naval architect with escalating job responsibilities in project size and engineering complexity. Senior Naval Architect shall have accumulated significant professional experience in marine construction, ship repair, marine regulations and class rules, and ship design. The Senior Naval Architect is experienced in naval architecture software to solve complex problems associated with hull stability, strength, resistance, propulsion, mechanical systems and vessel design.	Bachelor's Degree in Naval Architecture and Marine Engineering. Eligible to sit for Professional Engineering Exam.

**SECTION 4 - LABOR CATEGORY DESCRIPTIONS CONTINUED**

<b>Labor Categories</b>	<b>Minimum/ General Experience and Years of Experience</b>	<b>Functional Responsibility</b>	<b>Educational Requirements</b>
Engineer	Minimum of 1 year of experience in general engineering technologies.	Follows directions from the Senior Engineer to perform engineering first principle calculations of foundations, hull structural analysis, mechanical systems, shock, vibration and structural design. The engineering is familiar with engineering analysis software and performs basic analysis under the direction of the Senior Engineer.	Bachelor's Degree in Engineering.
Naval Architect	Minimum of 1 year experience in design and analysis of marine vessels.	Follows directions from the Senior Naval Architect to carry out basic design and calculations relating to vessel design calculations. The naval architect is thoroughly familiar with USCG and ABS rules and regulations. The naval architect is familiar with ship design software and performs routine naval architecture analysis of various vessel designs under the direction of the Senior Naval Architect.	Bachelor's Degree in Naval Architecture and Marine Engineering.
Designer	Minimum of 1 year experience in Computer Aided Design.	Prepares moderate to complex detailed drawings and designs layouts utilizing CAD technologies.	High School Diploma or GED.
Administrative	Minimum of 4 years experience in general office duties.	Coordinates the administrative tasks of project and document management. Manages all aspects of human resources. Prepares financial statements. Manages time & billing software. Prepares client invoices and maintains client records.	High School Diploma or GED.

## Section 5 - Projects

### 35M Aluminum Patrol Boat

As a subcontractor to QED Systems, Inc., Downey Engineering Corporation (DEC) provided extensive engineering services to Swiftships Shipbuilders, LLC (SSL) in support of their 35M Aluminum Patrol Boat Program. DEC modified the scantlings of the original SSL vessel to meet the ABS High Speed Naval Craft Rules. DEC provided a complete detailed design package and 3-D modeling to SSL which included all arrangements, structure, piping, machinery, propulsion, electrical and outfitting. In addition, DEC provided all structural part creation.



### US Coast Guard Cutter Bertholf (WMSL 750)

DEC provided extensive structural design and analysis support to Northrop Grumman Shipbuilding throughout the design development of the USCG National Security Cutter Bertholf. DEC provided a full-ship finite element model for a global stress analysis followed by fine mesh models for several details. In addition to the structural validation, DEC also provided a longitudinal strength study, hull penetration analysis,



fashion plate study, shear flow analysis, hanger racking study, and full-ship fatigue analysis. DEC also provided ShipConstructor modeling of the NSC superstructure.

### LPD-17

DEC was a principal subcontractor to Northrop Grumman Shipbuilding in the detail design of the US Navy's San Antonio Class LPD-17. DEC's design team provided overall scantling analysis and verification, two-dimensional and three-dimensional finite element stress analysis of key structural elements, foundation and outfitting design, systems penetration analysis, DDAM shock analysis, production level hull unit drawing review and production field support.



### LHD 8

DEC provided extensive structural foundation DDAM shock analysis for the LHD 8 program for Northrop Grumman Shipbuilding. DEC was also tasked with providing a detailed shock analysis of various watertight bolted plates to verify water tight integrity during a shock event.



### LHA 6

DEC provided extensive structural foundation DDAM shock analysis for the LHA 6 program.



### USS Zumwalt (DDG-1000)

DEC provided extensive structural design and analysis support to Northrop Grumman Shipyard throughout the structural design development of the DDG-1000. DEC provided scantling verification, a full-ship finite element model for a global stress analysis followed by fine mesh models for local details in order to meet the ABS Naval Vessel Rules. In



addition, DEC was tasked with production level drawing development and drawing review.

### **NOAA SWATH Coastal Mapping Vessel**

DEC provided a full ship global stress analysis for the NOAA SWATH Coastal Mapping Vessel for VT Halter Marine. In addition to the global stress analysis, DEC provided a full ship fatigue analysis to meet the ABS rules and created a penetration guidance drawing to assist VTHM engineering with systems routing.

