



Town of Discovery Bay

New Town Office Building

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Agenda

Modular Construction

- What is Modular Construction?
- Used for variety of final products
- The process of a modular construction project
- Benefits of Modular Construction

Mobile Modular

- Who we are
- Industries served
- Why choose us?
- Portfolio of projects (Prior Government Projects)

Custom Modular Solution for the Town of Discovery Bay

- Mobile Modular's CMS Division
- Delta Community Presbyterian Church
- Preliminary rendering and design
- Design agreement
- Flexibility
- Future expansion



What is Modular Construction?

 A method of construction by which a building is constructed at a manufacturing facility in shippable sections, delivered to the project site as substantially complete modules, and assembled to create the complete structure as designed.

• The same building codes apply, and the same construction materials are used as a building constructed on site using conventional construction.



"Modular" as a term is typically thought of as a particular product:









But in fact, it is a process that can be used to provide a variety of final products:



The Process



Modular consultant works with client/architect to understand project scope, client's needs, capabilities, budget, along with short/long-term project demands.



Modular consultant and manufacturer(s) get involved during the design/development phase to provide input on providing modular efficiency to the project. The earlier the consultant and factory engage with the design team, the better the outcome. Designs can focus on modular friendly layouts that reduce schedule and budgets.



The architect leads the client through the design effort while the modular team ensures the project is designed in a modular friendly fashion. Modular engineering and building design take place in a dual effort to accelerate the schedule. Plans are typically sent to the State (handled by manufacturer) for review/modular approval and to the local Municipality (handled by AOR) for local site plan approval.



After plans are approved, the factory begins ordering materials and building the modules, while the GC begins site work and creating the appropriate foundation. The modular manufacturing team will produce the Construction Drawings (Shop Drawings). The AOR and manufacturer coordinate closely via the modular consultant.



Modules are set and finished on site, exterior and interior work to be completed by the GC and site subcontractors. Work done in factory and on site can vary based on each project.







The Process

MODULAR CONSTRUCTION SCHEDULE

DESIGN PERMITS & SITE DEVELOPMENT INSTALL & SITE RESTORATION

BUILDING CONSTRUCTION AT PLANT

INSTALL & SITE RESTORATION

TIME SAVINGS!

SITE BUILT CONSTRUCTION SCHEDULE

DESIGN	PERMITS &	SITE DEVELOPMENT	BUILDING	SITE RESTORATION
ENGINEERING	APPROVALS	& FOUNDATIONS	CONSTRUCTION	



The Process: Manufacturing







Standard Block Set: This system allows rapid installation with lower costs. Auger anchors (or similar) are used to anchor the building.



<u>Poured Piers</u>: This system requires added labor and expenses. However, it is required in certain jurisdictions. The structure is welded to imbedded plates.





Wood Panel Support System



Concrete Wall Support System







<u>Pit Set with Pier Support System</u>: A pit set allows the threshold of the building to be at grade while space is maintained below the building to run utilities.



Crawlspace: Typically utilities would be run below the buildings.



Full Height Support Structure using a steel foundation on concrete piers.

Structural steel Foundation support system



The Process: Delivery

Delivery of modules are traditionally brought on site by a flat bed truck or have built-in wheels and axles. Logistics often include having to deliver modules by boat.



Traditional Flatbed Delivery



Freight delivery: These buildings don't have running gear. They were designed to stack so they could be loaded on a ship. Once they arrived on island it was 40 miles to the nearest road; modules were air lifted onto the site.

mobile

The Process: Installation







The Process: Installation





The Process: Completion of Exterior Finishes







Once the modules are set on the foundation, Mobile Modular will secure the building to the foundation, complete the weather wrap process and complete the roof systems.

Exterior finishes are then applied to the modules. Various exterior finish applications can be utilized, just as with traditional site-built methods.



The Process: Completion of Exterior Finishes









The Process: Completion of Interior Systems and Finishes

- Electrical crossover connections
- Completion of HVAC systems
- Completion and connection of fire sprinkler system
- Installation of fire alarm and other low voltage systems
- Interior wall texture and paint
- Completion of Acoustical Ceilings Tiles (ACT), which allow access to, but conceal the MEP
- Flooring



Benefits of Modular Construction

Speed

- Concurrent factory construction and site preparation
- Faster building approval process through the state
- Reduced weather-related delays with construction under roofed environment
- Replicable system and processes

High Efficiency

- Resource efficiencies less waste due to factory environment
- QA / QC program and frequent inspections provide immediate feedback



Benefits of Modular Construction

Flexibility

- Process accommodates the specific needs of each project, owner, and architect
- Able to create customized solutions to meet construction goals, incorporating owner's specifications
- Design: match or blend with aesthetics of existing buildings
- Materials: use factory standard materials or provide materials architect/owner has selected
- The best of both worlds: modular buildings can be intermixed with site construction and complex architectural details

Longevity

- Same construction materials as site-built construction, installed on concrete foundation provides at least the same life expectancy as a site-built structure with 50+ years expected lifespan
- Perimeter stem-wall foundations allow accessible space to maintain building utilities over the years



Benefits of Modular Construction

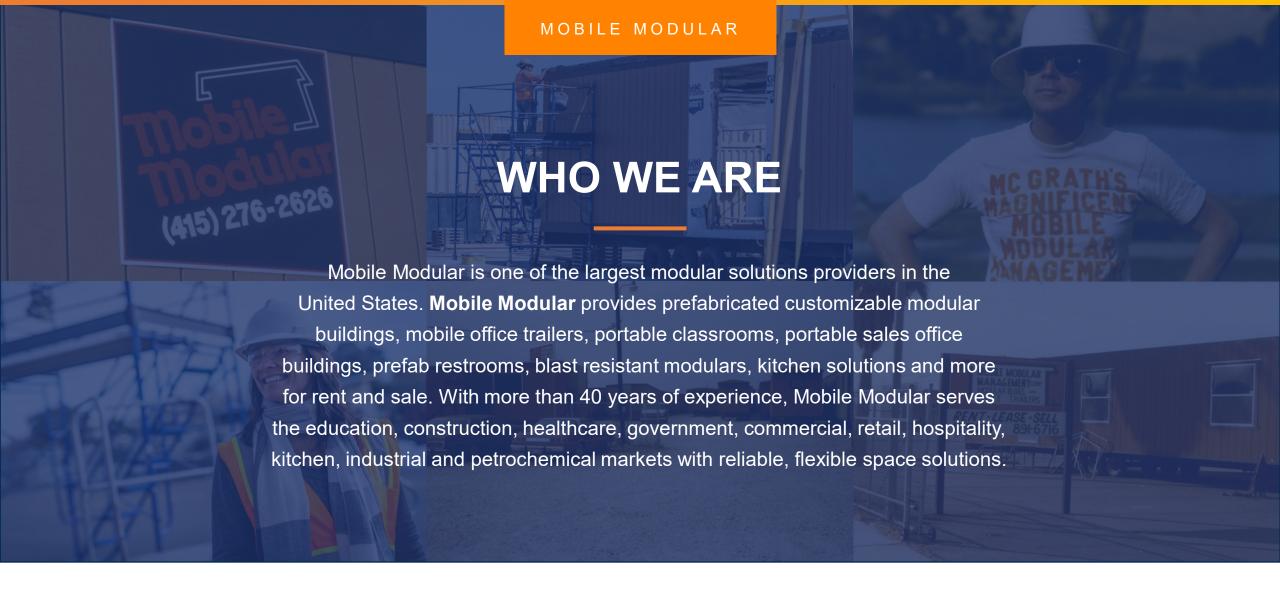
Economy

- Reduced upfront costs with pre-approved factory structural designs
- Buy and build at current market rate avoiding the high cost of prevailing wage rates on site

Control

- Design, procurement, construction, management, delivery, erection, supervision, completion, punchlist, and warranty all under one roof
- Accountability for total project through one point of contact
- Deliver and install in a short time frame, when the weather is good. Reduce the time of construction exposed to the elements or security risks







National Memberships & Affiliations



Awarded Contract

Contract # 120822-MMR





Sourcing. Strategy. Savings.





INDUSTRIES SERVED

- Construction
- Education
- Government
- Industrial
- Manufacturing
- Medical
- Retail
- Food Service
- Hospitality



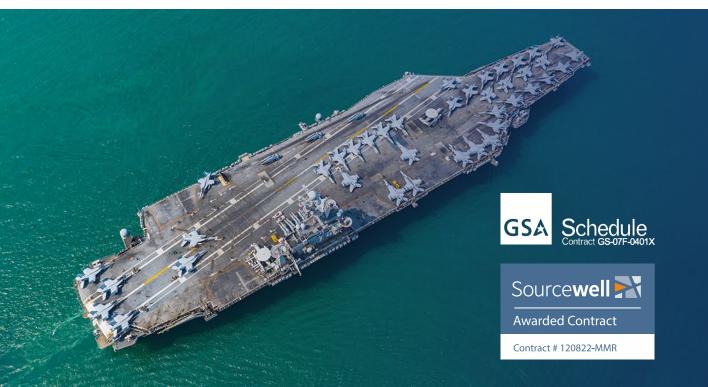


FEDERAL CLIENTS

- National Aeronautics and Space Administration
- Department of Homeland Security
- General Services Administration

- Department of Veteran Affairs
- Defense Intelligence Agency
- Department of the Air Force
- Department of the Army
- Department of the Navy

- Department of Defense
- National Parks Services
- US Coast Guard
- US Marine Corps
- Forest Service



CONTRACT INFORMATION

Duns: 096226253 Cage Code: 0PJ96 UEI : LVDDZJ5UBDS4

Size: Large

GSA Schedule 56 Contract # GS-07F-0401X

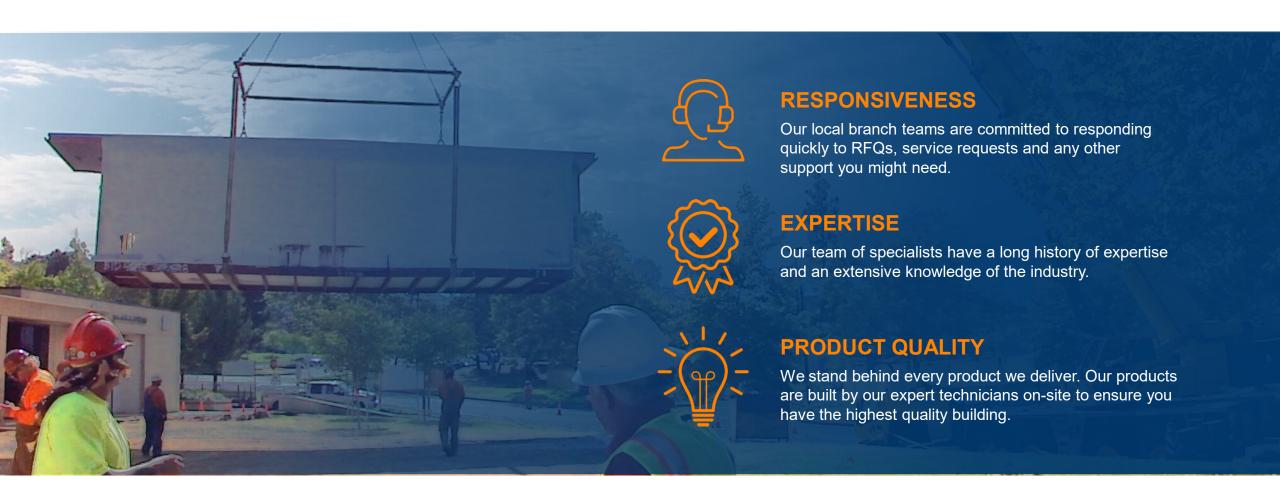
NAICS Codes:

332311-Prefabricated Metal Buildings 321992-Prefabricated Wood Buildings 531120-Lessors of Non-res. Buildings 531190-Lessors of Other Real Prop. 532120-Truck, Util. Trailer & RV Rental 332439-Other Metal Container Mfg.

PSC Codes:

5410-Prefabricated & Portable Bldgs. 5450-Misc. Prefabricated Structures N054-Install of Prefab Structures X111-Lease-Rent of Office Buildings X199-Lease-Rent of Misc. Buildings

WHY CHOOSE US?





Modular Government Projects





Long Beach Gas & Oil – 16,000 sf Admin Bldg.



Modular Government Projects





U.S. Bureau of Reclamation Klamath Falls, OR 56 Offices, 15080SF



Modular Government Projects

City of Los Angeles Hilda Solis Care First Village Homeless Housing

60,000SF 232-bed housing complex





Modular Government Projects

See many more at https://www.mobilemodular.com/resources/case-studies



Custom Modular Solutions

Your unique project is our quality solution.

Mobile Modular is a nationwide custom modular solutions provider. Our experts will partner with you every step of the way, from design to engineering to installation. We ensure your building is installed on time and within your budget. Our custom modular solutions are ideal for a wide range of applications and uses.



Custom Solutions for All Major Industries



















Types of Custom Modular Solutions

- Classrooms
- Dormitories
- Administrative Space
- Courtrooms
- Government Offices
- Restrooms
- Medical Clinics
- Cafeterias
- And more!









Capabilities of Custom Modular Solutions

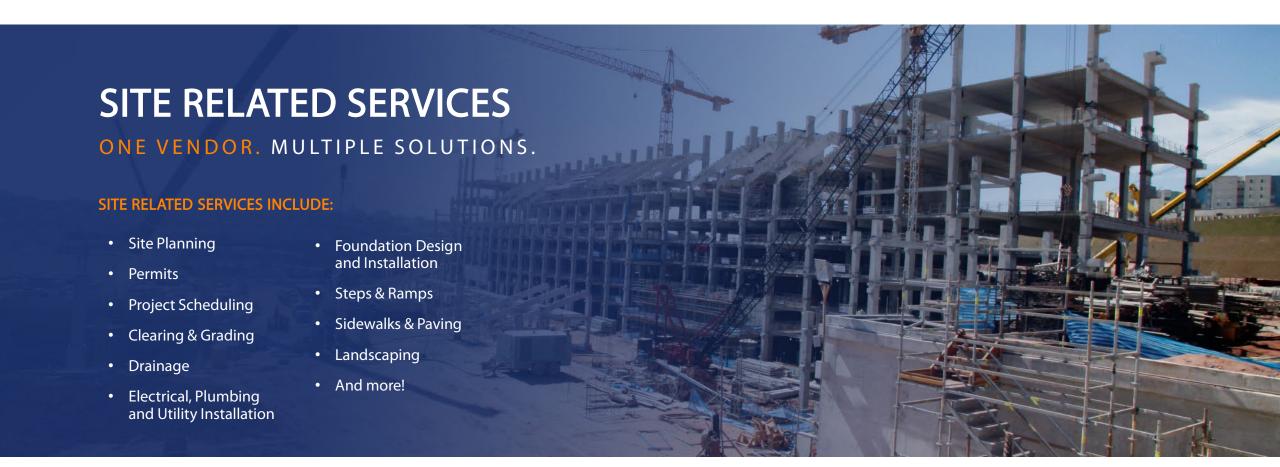
- Design Build
- Turnkey Services
- Sustainable Design
- Construction Management
- Foundation Design and Installation
- Utility Design and Installation
- Platforms, Ramps, Sidewalks
- Steps and Canopies
- Site Development
- Multiple Stories
- Customizable
- High-End Exterior and Interior Finishes













Delta Community Presbyterian Church 1900 Willow Lake Rd.

Foundations



Delta Community Presbyterian Church 1900 Willow Lake Rd.

Delivery and Install





Delta Community
Presbyterian Church
1900 Willow Lake Rd.





Town of Discovery Bay Offices

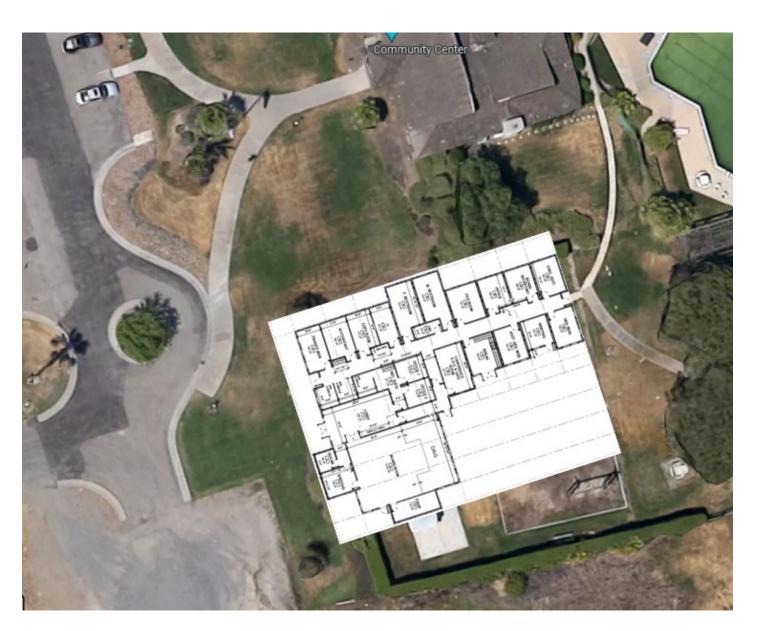
Presentation Design



PRELIMINARY FLOORPLAN

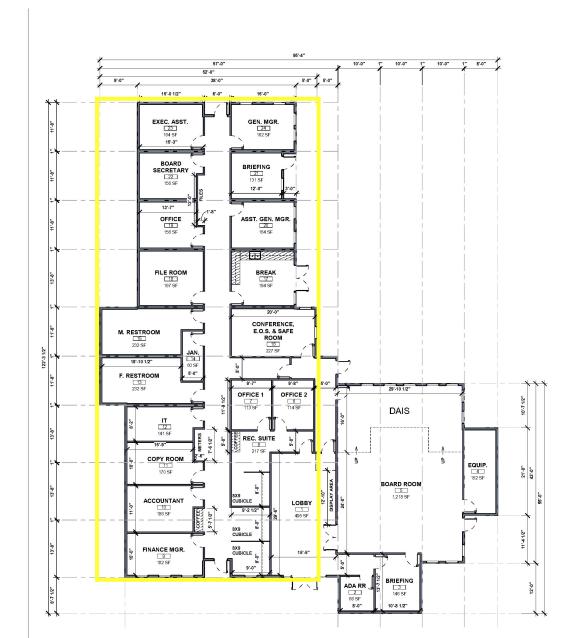
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Preliminary Placement on Site



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Possible Phasing for future development



MOBILE MODULAR



Town of Discovery Bay - New Town Modular Office Building - Project Synopsis

Project Goal:

To Provide a cost-effective, Turnkey Modular Solution, to include:

Architectural/Engineering/Modular design services, 100% Construction Drawings, Site preparation, Parking lot development, Permitting, Utility connection, landscaping, hardscapes, Trellis/Awnings, life safety systems, and Modular Building Delivery and Installation to include exterior and interior finishing, and furniture if required. Our goal is to provide a complete modular solution to fit your need. All designs to be generated with ADA and Title-24 compliant considerations.

Sequence of Events (Tentative & Non-Exhaustive)

- Design Contract Execution
- Design & Pre-Construction Phase (100% CDs)
 - Evaluation + Planning + Municipality research + AHJ review
 - Modular Building + Component Design
 - Full Site (A/E)
 - o Land Use Application
 - Security Fencing & Sound Wall (if required)
 - o Life Safety
 - MEP design
 - Low Voltage design
 - Foundation
 - o Landscaping + Irrigation Design
 - Permitting
- · Site Development & Prep
 - Mobilization
 - o General Site Prep & Layout
 - Construction entrance
 - Tree protection
 - Fencing as required
 - Dust Protection
 - Place Dumpsters and Construction equipment
 - Pre-Con Meetings + Site Safety + Site Supervision
 - Demolition
 - Clearing and Grubbing
 - Contour grading
 - Retention / Detention installation
 - Utility lateral routing
 - o Rough Grading

Town of Discovery Bay Offices



Project Process Synopsis

- Modular Foundation Installation "Pit" Style
 - Footings
 - Stem Wall
 - Access points
 - Ventilation
 - Moisture Protection
 - Pest Prevention
- Modular Delivery and Installation (some items are subject to power & water added to building)
 - Modular Fabrication
 - Freight units to site & Stage
 - o Crane install units onto "pit" style foundation
 - Buildings installed at grade level
 - Weld units onto foundation
 - o Fit and Finish Buildings
 - Install Exterior Siding
 - Install complete roofing system
 - Install Signage
 - Deliver furniture
 - o MEP crossovers and connections
- Site Finishing + Additional Modular Finishing
 - o MEP Utility Connections & Final Install
 - Includes backfill and grading
 - o Low Voltage / Data Comm Installation
 - Life Safety systems Installation
 - o Paint Modular interior walls
 - Install Modular flooring
 - o Install Modular ceiling
 - Parking Lot Installation
 - o Hardscape Installation
 - Finish Grading
 - o Trellis / canopy installation
 - o Gutter Installation
 - Landscaping
 - Fencing and sound wall installation as required
- Substantial Completion
 - Punch list and repair
 - Final Cleaning
 - o Close out process & Documentation

