



**ESI** | Enviremedial  
Services, Inc.  
*The Solution is Clear*

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## **Capabilities Statement Specific to USACE COVID-19 Market Research Request**

### **Points of Contact:**

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SAM Registration: Yes  
SAM Registration for Disaster Recovery: Yes

### **1. Describe your company's capability and expertise. Include any examples of design-build work you have done.**

#### Capabilities Background:

- Enviremedial Services currently manufactures containerized self-contained systems for USACE Charleston and other DOD and Government agencies in various sized (10', 40', 53') CONEX containers. These containerized systems are insulated and include all utilities required in the PWS including electrical, water distribution, potable water intake, compressed air systems, HVAC, water holding tanks, and sewer discharge.
- Current systems are manufactured with washable epoxy flooring which can be adhered to walls and ceilings.
- Systems are currently manufactured and used for multiple purposes including wash rack recycling systems, rainwater harvesting systems with solar system electrical, and handwashing stations. ESI has the manufacturing capability to immediately convert existing manufacturing process to meet the specifications of this PWS.
- Systems are prefabricated offsite at ESI's manufacturing facility in Pinedale WY and are transported by truck and trailer to the site location.
- Enviremedial Services has manufactured and delivered over 100 such containerized systems for end-use by Government personnel.
- ESI manufacturing facility can accommodate the construction of multiple containerized systems at one time.

- Enviremedial Services has manufactured such systems for over 20 years and has an extensive network of suppliers and transporters.
- Photos of existing systems in various stages of construction and delivery are included at the end of this document. These photos are examples of our CONEX box manufacturing capabilities. ESI has converted CONEX boxes for various uses over our manufacturing history and we can quickly and easily adapt to the SOW requirements.
- ***Please see end of this document for in progress photos of our existing systems.***

#### Adaptation to SCIUs

- Systems can be constructed with interior walls, counters and appurtenances to accept fixtures and equipment. Exterior access points can be created to ensure separation of multiple patients and entry for healthcare workers.
- CONEX containers can be zoned to meet the specifications of the PWS.
- ESI Manufacturing facility will require very little re-tooling or adaptation thus insuring the most efficient build process and speedy delivery.
- ESI has design and engineering professionals on staff to provide the necessary drawings, diagrams, and equipment submittals.
- ESI can deploy a full contained hand-washing trailer with 12 sinks and 500-gallon potable water capacity immediately. This system is completely built and ready for delivery.

#### **2. If applicable, please also describe what specific COVID and/or Non-COVID structures you offer:**

In response to COVID-19, Enviremedial Services, Inc., working at the request of USACE specifications and requirements, has designed Self Contained Isolation Units (SCIU) to be employed as designated Alternate Care Sites (ACS) in close proximity to full-service hospitals. These units are CONEX type containers (shipping containers) retrofitted to house multiple Corona Virus patients that can be cared for by medical personnel while being supported by the local hospital. These units effectively provide satellite patient wards with emphasis on patient isolation, infection control, fire protection, and life safety.

These units can be adapted for institutions such as correction facilities or municipal homeless centers, needing additional housing for non-hospitalized, quarantined COVID-19 positive patients.

Our SCIUs house three patients in separate, isolated rooms. One design utilizes power from the municipal power provider and the second is supported by a solar panel array and can operate in a stand-alone off-grid manner. Modifications to the layout can be facilitated to meet virtually any site-specific or needs-based requirement.

The SCIUs are fabricated to meet all NFPA 99 Category 2 “Plus” requirements. They will be transported to the designated location via truck where they will be connected to existing utilities and furnished with patient beds and required medical equipment. By design, they are fully insulated, wired, and plumbed to meet all provided specifications including heating, HVAC, and oxygen to support patient care while providing necessary facilities for medical staff.

#### **3. From the time an order is made (say from one of our contractors) how long until they can be delivered, including installation if applicable?**

Initially, our manufacturing facility can produce 15 3-patient units every four weeks. During the first two months, we will be able to ramp up our production capabilities to 30 3-patient units every four weeks.

**4. Specifically, the medical unit, from your factory, to the East Coast, West Coast, etc., does that location add to delivery time? If so, how much?**

As our manufacturing location is in Pinedale WY, it will take approximately 2-3 days for transport to the West Coast. East Coast delivery will take 4-5 days.

**5. What are the costs, per unit, and any additional cost (medical units)?**

Cost per 3-patient unit is \$139,936.00 Additional costs may add \$30,000.00 (Non-solar)

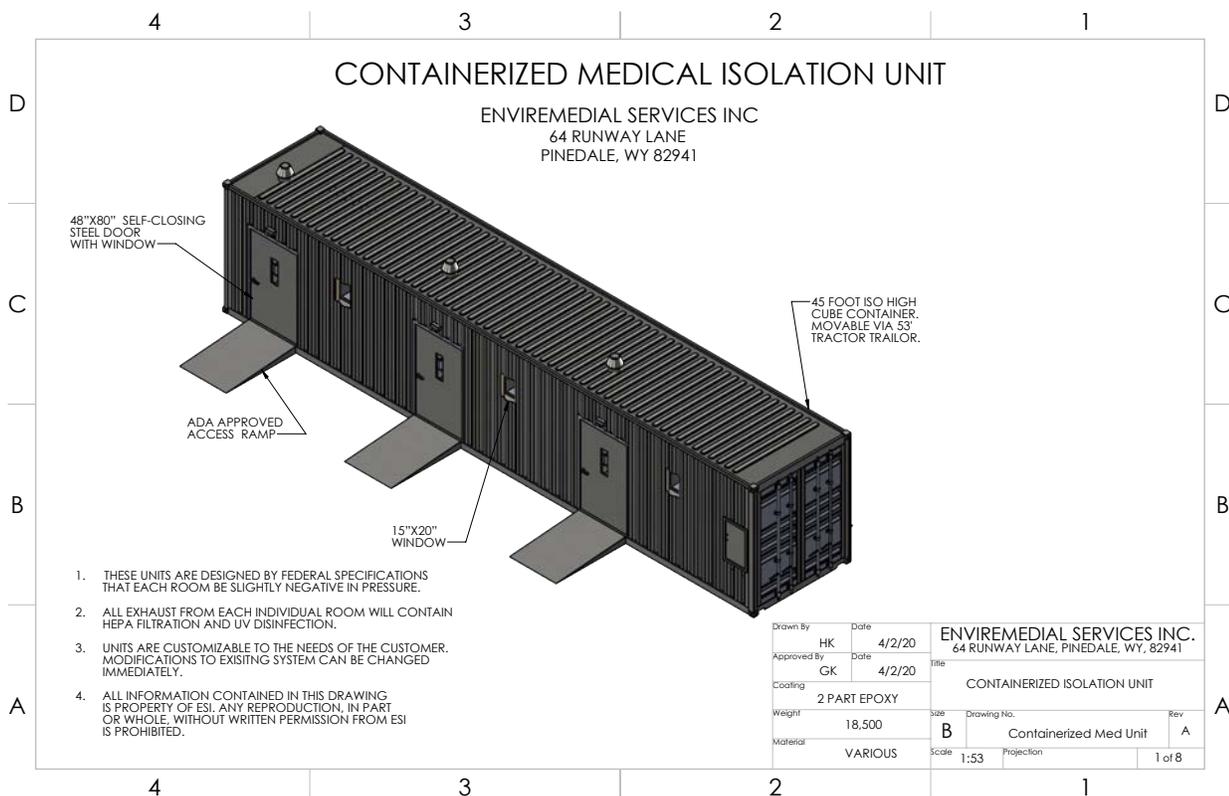
**6. What is the maximum number of medical patient care units you can output, deliver, and install within 24 hours, 48 hours, 72 hours?**

See #7 Below

**7. How many units could you deliver in 1 week, 2 weeks, 3 weeks, 4 weeks?**

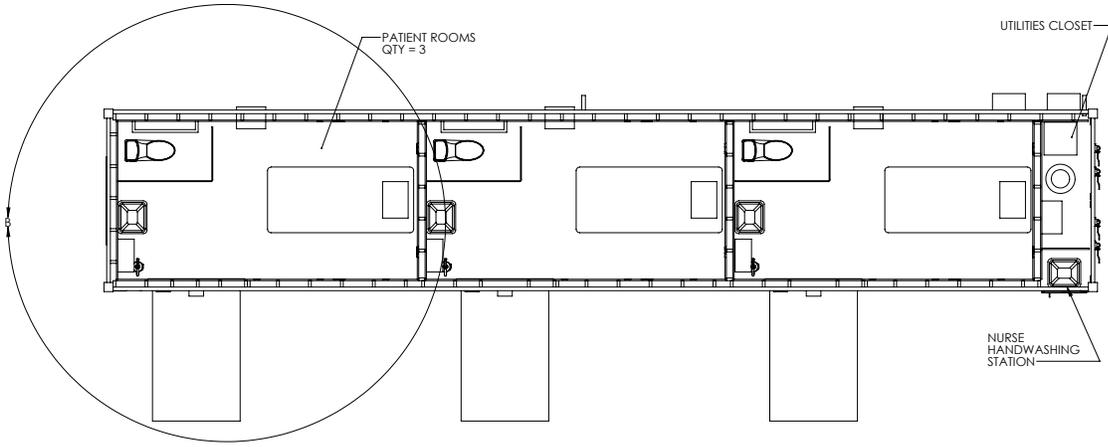
We can initially produce, deliver, and install 15 3-patient units every four weeks plus 2 – 5 days for delivery to the requested site location. (Add shipping time to Alaska and Hawaii). After ramping up of production, output will increase to 30 units every four weeks.

**8. Please provide pictures and specifications of units if possible.**



### 3-ROOM MEDICAL ISOLATION UNIT: CONTAINER FLOOR PLAN

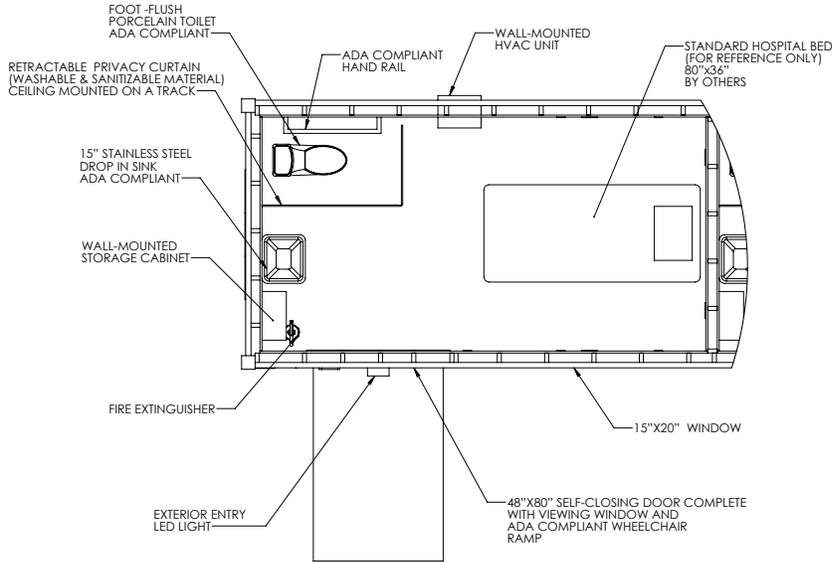
ESI'S CONTAINERIZED MEDICAL ISOLATION UNIT CONSISTS OF 3 SEPARATE PATIENT ROOMS AND A UTILITIES CLOSET, HOUSED IN A 45 FOOT SHIPPING CONTAINER. THE UNIT CAN BE CONFIGURED TO HOOK UP TO CITY WATER, SEWER AND POWER OR RUN AS A STANDALONE UNIT WITH TANK STORAGE AND A SOLAR PACKAGE. BOTH OPTIONS ARE FEATURED IN THIS DRAWING.



1. SEE SHEET 1 FOR NOTES.

Rev	Drawing No.		
A	Containerized Med Unit		
Scale	1:40	Projection	3 of 8

### PATIENT ISOLATION ROOM: FLOOR PLAN



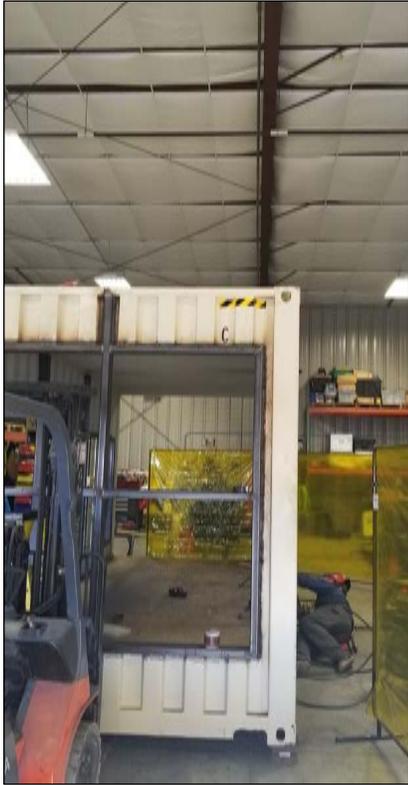
NOTE: EACH ROOM WILL BE OUTFITTED WITH A DIMMABLE OVERHEAD LED LIGHT ON 3-WAY SWITCH.

COMPONENT	SPECIFICATION
ROOM SQ FOOTAGE	100.4 SQFT
ROOM LENGTH	13.625 FT
ROOM WIDTH	7.25 FT
DOOR HEIGHT	80 INCHES
DOOR WIDTH	48 INCHES
WINDOW HEIGHT	20 INCHES
WINDOW WIDTH	15 INCHES

1. SEE SHEET 1 FOR NOTES.

Rev	Drawing No.		
A	Containerized Med Unit		
Scale	1:40	Projection	5 of 8

**Photos of Current Design / Build Work for ESI Manufactured Systems Described in Question 1 above:**



*CONEX Box with side openings and divider walls in construction progress including plumbing, electrical, and divided rooms.*



*Water Storage, Filtration System and Hot Water Heater housed in CONEX Container.*



*Left: Exterior of ESI Rain Harvest System showing Utility Hub points.*

*Right: Interior of existing CONEX Box housing a vehicle wash rack recycling system for the US military. This system contains all utilities including plumbing, electrical, sewer discharge, high pressure air, high pressure water, and HVAC. The system is manufactured using Unistrut for running conduit and attaching other components.*