4. PERFORMANCE REQUIREMENTS SUMMARY

Deliverables	Delivery Schedule	Performance Requirements	Acceptable Quality Levels	Incentive and Disincentive
Readiness		How the Contractor will maintain a readiness posture to support multiple disaster scenarios of different scales while minimizing readiness costs to the Government.		
Phase-In Plan	Within 7 calendar days of contract award	The Contractor will submit a Phase-in Plan for approval within 7 calendar days, and complete the Phase-In process within 30 calendar days. The Phase-In Plan will describe the Contractor's approach for completing all necessary activities for administering and implementing the Contractor's technical approach, including preparedness to accept task order activations for disaster support activities. See PWS reference for additional performance requirements.	Timely submission and Government acceptance	
Unit Maintenance Call Center	Call Center shall be fully operational prior to first unit installation	Establish and coordinate maintenance procedures and applicant update procedures. The Contractor must have procedures and toll free numbers established and made available for applicants to report maintenance calls such as emergency, routine, and after-hours calls or calls to check on the status of their particular case. Call center shall be available 24/7. Reporting shall be accurate and complete.	Maximum time on hold of 5 minutes; Relay accurate maintenance request within one hour of call termination; Relay accurate emergency maintenance request within 15 minutes of call termination.	
Mass Care		Establish a Services Plan to include sheltering, feeding, bulk distribution, for the affected general population, services for special-needs populations, and services for animals within the affected area are rapidly provided.		

Deliverables	**Delivery Schedule**	**Performance Requirements**	**Acceptable Quality Levels**	**Incentive and Disincentive**
Housing Operations				
Staging Area Construction 3.5.3	Begin construction within 48 hours of task order award or a notice to proceed; complete construction within timelines established by task order or approved work plan.	Meet timelines and quality standards established by PWS, task order and approved work plan. Monitor daily and weekly reports and document performance.	Meet or exceed timelines and quality standards established by PWS, task order and approved work plan.	
Private and Commercial Installations 3.7.2	72 hours from 4:00 PM on the day the work order was issued.	Meet timelines and quality standards established by PWS, task order and approved work plan.	Meet or exceed timelines and quality standards established by PWS, task order and approved work plan.	
Site Inspection Report 3.7.2.9	Within 72 hours of 4:00 PM on the day the inspection/ assessment order is issued.	Complete and accurate content as described in the PWS, Task Order and any technical direction from the COTR	Timely submission and Government acceptance	
Group Site Design:	Within 24 hours	Sufficient quantities and complete and accurate content	Timely submission of	

Conceptual Design Package 3.7.3.2.(q)	after site approval.	as described in the PWS, task order and any technical direction from the COTR	required quantities and Government acceptance	
Group Site Design: 50% Design Package 3.7.3.2.(r.)	Within 3 days of FEMA's approval to develop the site	Sufficient quantities and complete and accurate content as described in the PWS, task order and any technical direction from the COTR	Timely submission of required quantities and Government acceptance	
Group Site Design: Final Design Package (100%) 3.7.3.2. (R)	As specified in task order	Sufficient quantities and complete and accurate content as described in the PWS, task order and any technical direction from the COTR	Timely submission of required quantities and Government acceptance	
Group Site Construction 3.7.3.3.	Begin construction within 48 hours of task order award or a notice to proceed; complete construction within timelines established by task order or approved work plan.	Meet timelines and quality standards established by PWS, task order and approved work plan.	Meet or exceed timelines and quality standards established by PWS, task order and approved work plan.	
As-Built Field	Upon	Sufficient quantities and	Timely	

Survey 3.7.3.3. (G)	completion of group site installations	complete and accurate content as described in the PWS, Task Order and any technical direction from the COTR	submission and Government acceptance	
Final Report for Group Site Construction 3.7.3.3(h)	Within 7 days of contract completion	Sufficient quantities and complete and accurate content as described in the PWS, Task Order and any technical direction from the COTR	Timely submission and Government acceptance	
Unit Maintenance 3.7.4	As specified in PWS and task order	Meet response times and standards in PWS and task order. Submit accurate and complete information on maintenance activity in daily and weekly progress reports.	Timely completion of maintenance requests; timely and accurate reporting of maintenance activity	
Deactivation and Unit Realignment 3.7.6	As directed by the COTR	Deactivate, remove, and transport units to locations identified by FEMA as directed by the COTR.	Timely completion of work order; meet quality standards of PWS	

5. MANAGEMENT OF GOVERNMENT FURNISHED EQUIPMENT AND PROPERTY (GFE, GFP)

5.1. The temporary housing units, acquired at government expense, including associated appliances and furnishings, are GFE.

5.2. No alterations or modifications shall be made to Government-furnished equipment or property without prior written permission from the COTR.

5.3. The Contractor shall be responsible for periodic servicing, maintenance, and repairs of Government-furnished property, items or equipment.

5.4. The Contractor shall be responsible for paying the costs of any replacement or repairs of any lost or damaged equipment due to negligence, or abuse by the Contractor's employees.

5.5. The Contractor shall account for all GFE and GFP and provide an inventory to the COTR or designee as required. The inventory shall include the location, quantity, and condition of the GFE and GFP.

6. PLACE OF PERFORMANCE

6.1.[Solicitation 1: Regions 1, 2, 3, 4 and 6.]

6.2.[Solicitation 2: Regions 5, 7, 8, 9 and 10.]

7. PERIOD OF PERFORMANCE

7.1.The period of performance shall be for two years from the award date with up to three one-year options, for a total of up to five years.

8. SECURITY

8.1. The Contractor's system shall not capture or request information such as birthdays, social security numbers, credit card, financial, other disaster financial assistance, and/or medical information from the potential disaster applicants. It must contain appropriate measures to protect applicant information, which is information protected by the Federal Privacy Act that must be safeguarded at all

times. The applicant information does not belong to the Contractor and any requests for the information must be forwarded to FEMA.

8.2. The Contractor-provided personnel shall meet FEMA's established security background checks requirements. Contractor and its personnel also shall adhere to Federal privacy laws, including the Privacy Act.

8.3. The Contractor shall wear Contractor and/or FEMA- provided photo ID badges at all times while performing tasks associated with this contract. Badges shall be worn over the front of an individual's outer clothing. The badges are the property of FEMA and shall be returned upon termination or completion of assignment and/or when the Contractor no longer employs an employee whichever is sooner. These requirements also include subcontractors. It is the Contractor's responsibility to return these badges to FEMA within ten (10) calendar days upon termination or completion of assignment and/or when the Contractor no longer employs an employee whichever is sooner.

8.4. FEMA shall exercise full control over granting, denying, withholding, or terminating unescorted access to FEMA facilities, personnel, assets, resources, clients, emergency partners, or handling of both classified and sensitive Government or other information, including proprietary data or resources, by Contractor employees found or deemed to be unsuitable or whose continued employment on the contract is deemed contrary to the public interest or inconsistent with the best interest of the government.

8.5. In order to gain access to FEMA facilities, personnel, assets, resources, clients, and emergency partners, or sensitive information including proprietary data or resources, Contractor employees must be in possession of an approved, current and valid FEMA identification badge. No Contractor or subcontractor employee shall be allowed unescorted access to a FEMA facility or other area subject to security regulations without a favorable entry on duty (EOD) decision or a suitability determination by FEMA Safety & Security Branch, Personnel & Information Security Section. Contractor employees awaiting an EOD may commence work, however, if authorized by the Contracting Officer. Issuance of a FEMA-approved identification badge is contingent upon obtaining favorable background check results.

8.6. Background Check: Criminal background checks must be conducted on all personnel holding a Contractor management or supervisory position in the field or disaster impacted area and any other employee or personnel as may be directed by FEMA. The Contractor must have a strictly enforced process to make sure background checks are conducted in a timely manner. The Contractor shall also establish a process for ensuring individuals lacking criminal background checks are not working with disaster assistance applicants or individuals and households and that they do not have or be given access to applicant and unit records. This requirement applies to Contractor employees and subcontractors alike.

8.7. Employment Suitability Determination: The Contracting Officer may direct the Contractor to exclude from performance of work on this contract any employee(s) found or deemed to be unsuitable or whose continued employment on the contract is deemed contrary to the public interest or inconsistent with the best interest of the Government. In these cases, the Contractor shall return to the COTR any DHS or FEMA- issued identification badges, and equipment, etc. from terminated or departing Contractor employees.

9. Intellectual Property

Any Contractor-developed system, software, designs and other materials paid for in full or in part under this contract, shall not be deemed property of the Contractor. Instead, ownership and use of the system and data shall be vested in FEMA. The Contractor shall develop and provide user manuals for the system to the Program Management Office (PMO) or designee and CO. The Contractor system(s) shall operate independent of FEMA systems, and the Contractor shall be responsible for informational accuracy and for updating their system information with, and for, all systems.

10. APPLICABLE DOCUMENTS

Uniform Federal Accessibility Standards (UFAS).

ANSI A 225.1

AMERICAN WATER WORKS ASSOCIATION (AWWA)

WWA B300 (1992) Hypochlorite's

AWWA B301 (1992) Liquid Chlorine

AWWA C500 (1993; C500a) Metal-Sealed Gate Valves for Water Supply Service

AWWA C502 (1994; C502a) Dry-Barrel Fire Hydrants

AWWA C651 (1992) Disinfecting Water Mains

AWWA C900 (1997) Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In., For Water Distribution

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 24 (1995) Installation of Private Fire Service Mains and Their Appurtenances

NSF INTERNATIONAL (NSF)

NSF 14 (1998) Plastics Piping Components and Related Materials

NSF 61 (1999) Drinking Water System Components - Health Effects (Sections 1-9)

National Association of Corrosion Engineers (NACE) criteria and standards

American Society for Testing and Materials (ASTM) C 478 (1997) Pre-cast Reinforced Concrete Manhole Sections.

ASTM D 1784 (1999a) Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

ASTM D 2321 (1995) Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.

ASTM D 2680 (1995a) Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping.

ASTM D 2751 (1996a) Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings.

ASTM D 3034 (1998) Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

ASTM D 3212 (1996a) Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

AASHTO - M147 - Materials for Aggregate and Soil-Aggregate.

ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.

ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8mm) Drop.

ASTM D1556 - Test Method for Density of Soil in Place by the Sand Cone Method.

ASTM D2487 - Classification of Soils for Engineering Purposes.

ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).ASTM D3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

ASTM D4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb (4.54 kg) Rammer and an 18-in. (457mm) Drop.

Local and State codes as applicable

ANSI C2 (1997) National Electrical Safety Code

NFPA 70 (1999) National Electrical Code

11. DEFINITIONS

Temporary Housing Unit: Manufactured housing, recreational vehicle, or other readily fabricated dwelling (e.g., pre-fabricated dwelling).

Manufactured Housing: A structure, transportable in one or more sections, built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities.

Mobile Home: A structure, transportable in one or more sections, built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation

when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained therein. In the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length, or, when erected on site, is three hundred twenty (320) or more square feet.

Park Model (a.k.a., Park Trailer): A dwelling unit built on a single chassis, mounted on wheels, designed to be connected to utilities necessary for operation of installed fixtures and appliances and has a gross trailer area of not less than three hundred twenty (320) square feet and less than four hundred (400) square feet exterior horizontal dimension in the set-up mode. In the traveling mode, are eight (8) body feet six (6) inches or more in width, and less than forty (40) body feet long. Is designed to facilitate occasional relocation.

Recreational Vehicle: A vehicle which is built on a single chassis; in the traveling mode, is eight (8) body feet six (6) inches or less in width and less than four hundred (400) square feet when measured at the largest horizontal projection; designed to be self-propelled or permanently towable by a light duty truck; and not designed primarily for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Travel Trailer: A vehicle-type unit primarily designed for recreation or temporary camping, travel or seasonal use, which is towed by another vehicle, in the traveling mode, is eight (8) body feet six (6) inches or less in width and has a living area of less than four hundred (400) square feet. Is designed to facilitate numerous relocations.

Readily Fabricated Dwelling: Could be considered to be, but is not limited to, a unit that is factory built or built on site from modular parts and generally does not have wheels.

12. ABBREVIATIONS

AAMS	Automated Acquisition Management System
ANC	Alaska Native Corporation

CAO	Chief Acquisition Officer
CAP	Contract Administration Plan
CCR	Central Contractor Registration
CFO	Chief Financial Officer
CO	Contracting Officer
COR	Contracting Officer Representative
COTR	Contracting Officer's Technical Representative
CPFF	Cost Plus Fixed Fee
CPO	Chief Procurement Officer
CS	Contract Specialist
D&F	Determination and Findings
DARAC	Disaster Assistance Replacement Assistance Consideration
DCAA	Defense Contract Audit Agency
DCN	Document Control Number
DFC	Disaster Finance Center
DHOPS	Direct Housing Operations
DHS	Department of Homeland Security
EA	Expedited Assistance
ECAPS	Enterprise Coordination and Approval Processing System
E-FOC	Exceptions to Fair Opportunity for Consideration
EHU	Emergency Housing Unit
FAR	Federal Acquisition Regulation
FCCOM	Facilities Capital Cost of Money

FCO	Federal Coordinating Official
FEMA	Federal Emergency Management Agency
FMC	Fully Mission Capable
FOC	Fair Opportunity for Consideration
G&A	General and Administrative
GAO	Government Accountability Office
GFP	Government Furnished Property
GSA	General Services Administration
HCA	Head of the Contracting Activity
IA-TAC	Individual Assistance Technical Assistance Contracts
IDIQ	Indefinite Delivery, Indefinite Quantity
IFMIS	Integrated Financial Management Information System
IG	Inspector General
IGCE	Independent Government Cost Estimate
IHP	Individuals and Households Program
JFO	Joint Field Office
MH	Manufactured Home
MD	Management Directive
NASA	National Aeronautics and Space Administration
NEMIS	National Emergency Management Information System
OCPO	Office of the Chief Procurement Officer
OFPP	Office of Federal Procurement Policy
OIG	Office of Inspector General

PAN	Preauthorization Notice
PM	Park Model
PMO	Program Management Office
PNM	Price Negotiation Memorandum
PRS	Performance Requirements Summary
PWS	Performance Work Statement
QASP	Quality Assurance Surveillance Plan
QCI	Quality Control Inspector
QCP	Quality Control Plan
RAA	Request for Allocation Adjustment
RFO	Ready For Occupancy
RFP	Request for Proposals
SFHA	Special Flood Hazard Area
SBA	Small Business Administration
SOW	Statement of Work
T&M	Time and Materials
TOPR	Task Order Proposal Request
UFAS	Uniform Federal Accessibility Standard
USPS	United States Postal Service
TT	Travel Trailer
VAO	Virtual Acquisition Office

Appendix A

Performance Requirements for Group Site Construction, Unit Installation and Staging Area Construction

Group Site Construction

Items of Work

The work requires the complete development (construction) of the Group Sites. The work includes but is not limited to: soil testing, surveying, clearing, grubbing, stripping, debris disposal, fill and grading, site utilities design and layout, fencing, installation of all necessary water, sewer, electric, gas (as appropriate), telephone distribution and facilities, cable access, roads and related installations, storm water management, and erosion prevention measures. Also provide safety fencing, signage, unit numbering, street lights, shelter lights and other items to ensure the safety of Group Site occupants as well.

Environmental Support

Support FEMA or designee work on any environmental issues. Obtain bonds and permits and begin development (construction) on time. The Contractor shall assess each potential group site for endangered species, historical concerns and check the Superfund Register. The Contractor shall coordinate with FEMA Regional Environmental Office, to be identified at the kickoff meeting.

Existing Utilities

The Contractor shall coordinate all utility relocation requirements and make payment to the utility companies for all services, fees, and permits required to relocate and re-establish service if applicable. Utility services shall not be interrupted except for brief periods to facilitate cut-ins. The Contractor shall be responsible for all costs related to protecting existing utilities. Coordinate utility installations with the local communications companies to include, but not be limited to, the local phone and cable companies, and not to impede completion deadlines.

Protection and Maintenance of Traffic

The Contractor shall coordinate all utility relocation requirements and make payment to the utility companies for all services, fees, and permits required to relocate and re-establish service if applicable. Utility services shall not be interrupted except for brief periods to facilitate cut-ins. The Contractor shall be responsible for all costs related to protecting existing utilities.

Surveys

The Contractor shall layout the work from the established bench marks For each feature of work, field staking shall define area limits such that the COTR can easily determine, without additional surveys, if alignment and/or limit adjustments need to be made.

As-Builts

An as-built field survey of all utilities shall be conducted after installation to determine the final locations and elevations of utility manholes and hydrants. Final elevations shall be determined for all sewer inverts and castings. 3 sets of drawings showing the locations of all features of the work. The as-builts shall be provided to the COTR.

Temporary Construction Facilities

The Contractor shall furnish and install (1) office trailer complete for his own use with all utilities and restroom facility. The trailer will be placed at the location designated by the COTR.

Construct appropriate hard surfaces in all common areas to include but not be limited to dumpster pad, wheelchair accessible van/bus stop, mail kiosk, etc. These areas must be accessible.

Fencing

The Contractor shall provide in the design, recommendations for chain link fencing and signage for safety reasons, including, but not limited to the following areas:

- Retention Pond
- Substation Area

If there is an additional area of concern identified by FEMA, the Contractor shall provide chain link fencing around that perimeter.

Phasing of Construction

Phasing may be required by FEMA. In that case, all construction areas shall have a perimeter marked by orange safety fencing and adequate signage, with controlled ingress and egress. As each phase of the group site is completed and opens to applicants, the unfinished phases shall be separated from construction areas with orange safety fencing and adequate signage until all construction is completed.

Group Site Utilities

Water Distribution System

References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN WATER WORKS ASSOCIATION (AWWA)

WWA B300 (1992) Hypochlorites

AWWA B301 (1992) Liquid Chlorine

AWWA C500 (1993; C500a) Metal-Sealed Gate Valves for Water Supply Service

AWWA C502 (1994; C502a) Dry-Barrel Fire Hydrants

AWWA C651 (1992) Disinfecting Water Mains

AWWA C900 (1997) Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In., For Water Distribution

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 24 (1995) Installation of Private Fire Service Mains and Their Appurtenances

NSF INTERNATIONAL (NSF)

NSF 14 (1998) Plastics Piping Components and Related Materials

NSF 61 (1999) Drinking Water System Components - Health Effects (Sections 1-9)

A connection to the municipal water supply may be required. The Contractor shall coordinate the proper fittings, procedures and meters needed with the local water company.

Service Lines: Piping for water service lines shall have a nominal size of ¾" diameter. Pipe shall be galvanized steel, polyvinyl chloride (PVC) plastic, Oriented PVC plastic polyethylene, or copper tubing. Water pipe riser shall be minimum ¾-inch and compatible with the service line.

Supply and Distribution Lines: Piping for water distribution lines shall be a minimum of 4 inches in diameter and shall be ductile iron, polyvinyl chloride (PVC), Oriented PVC plastic filament-wound or centrifugally cast reinforced thermosetting resin.

Fire Hydrants: Hydrants shall be dry-barrel type conforming to AWWA C502 and must be connected to at a minimum 6 inch diameter line.

Disinfection: Chlorinating materials shall conform to the following: Chlorine, Liquid: AWWA B301 and Hypochlorite, Calcium and Sodium: AWWA B300.

Meters: The Contractor shall furnish and install meters on each pad in accordance with local codes.

Utility Separation: The water lines shall be spaced from sewer lines in compliance with all state requirements.

Placing and Laying: PVC pipe shall be installed and backfilled in accordance with ASTM D 2774. Water-line materials shall not be dropped or dumped into the trench. Except where necessary in making connections with other lines, pipe shall be laid with the bells facing in the direction of laying. The full length of each section of pipe shall rest solidly upon the pipe bedding. Pipe shall not be laid in water or when trench conditions are unsuitable for the work. Water shall be kept out of the trench until joints are complete. When work is not in progress, open ends of pipe, fittings, and valves shall be securely closed so that no trench water, earth, or other substance will enter the pipes or fittings. Pipe ends left for future connections shall be valved, plugged, or capped, and anchored. If required, all lines are to be placed 6 inches below local frost lines.

Winterization. When required, winterize individual unit water lines with electric heat tape or other winterization treatment and extend 14” below the surface of the ground.

Thrust Restraint**:** Plugs, caps, tees and bends deflecting 30 degrees or more, either vertically or horizontally, on waterlines 4 inches in diameter or larger, and fire hydrants shall be provided with thrust restraints.

Hydrostatic test: The hydrostatic test shall meet the requirements of the local Public Service District. Smoke Tests are not acceptable.

Bacterial Disinfection: Before acceptance of potable water operation, each unit of completed waterline shall be disinfected as prescribed by AWWA C651. After pressure tests have been made, the unit to be disinfected shall be thoroughly flushed with water until all entrained dirt and mud have been removed before introducing the chlorinating material. The chlorinating material shall be either liquid chlorine, calcium hypochlorite, or sodium hypochlorite, conforming to paragraph "DISINFECTION". The chlorinating material shall provide a dosage of not less than 50 PPM. Valves on the lines being disinfected shall be opened and closed several times during the contact period. The line shall then be flushed with clean water until the residual chlorine is reduced to less than 1.0 PPM. During the flushing period, each fire hydrant on the line shall be opened and closed several times. From several points in the unit, the Contractor will take samples of water in proper sterilized containers for bacterial examination. The samples will be taken to a state certified laboratory for examination. The disinfection shall be repeated until tests indicate the absence of pollution for at least 2 full days. The unit will not be accepted until satisfactory bacteriological results have been obtained.

Sanitary Sewers

References. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

American Society for Testing and Materials (ASTM) C 478 (1997) Pre-cast Reinforced Concrete Manhole Sections.

ASTM D 1784 (1999a) Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.

ASTM D 2321 (1995) Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.

ASTM D 2680 (1995a) Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Composite Sewer Piping.

ASTM D 2751 (1996a) Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings.

ASTM D 3034 (1998) Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.

ASTM D 3212 (1996a) Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

ABS Pipe and fittings: ASTM D 2751

Laterals shall be 4 inches in size. Trunk lines shall be 6 inches in size. Acrylonitrile-butadiene-styrene (ABS) and polyvinyl chloride (PVC) composite sewer pipe and fittings shall conform to ASTM D 2680. Fittings shall be compatible with the pipe supplied and shall have a strength not less than that of the pipe.

PVC Pipe and fittings: ASTM D 3034, Type PSM with a maximum SDR of 35. PVC shall be certified as meeting the requirements of ASTM D 1784, cell Class 12454B.

Flexible plastic pipe (PVC or high density polyethylene pipe) gasketed joints shall conform to ASTM D 3212.

PVC pipe shall be installed and backfilled in accordance with ASTM D 2321.

Manholes shall be prefabricated of pre-cast concrete sections conforming to ASTM C 478. Joints shall be cement mortar, an approved mastic, rubber gaskets, a combination of these types; or the use of external preformed rubber joint seals and extruded rolls of rubber with mastic adhesive on one side. A ladder shall be provided where the depth of a manhole exceeds 4 feet. The ladder shall be constructed in accordance with OSHA. Frames and covers shall be cast iron, ductile iron or reinforced concrete. Cast iron frames and covers shall be as indicated or shall be of type suitable for the application, circular, without vent holes. The frames and covers shall have a combined weight of not less than 400 pounds and be seal tight lids. Reinforced concrete frames and covers shall be as indicated or shall conform to ASTM C 478.

Pipe Bedding. Bedding material shall consist of imported sand fill or gravel. Pipe Bedding shall contain not more than 20 percent by weight passing the No. 200 sieve. The maximum allowable aggregate size shall be 1-1/2 inches for gravity flow sewer and 3/4 inches for pressure pipe.

Pipe Laying. The bottoms of trenches shall be accurately graded to provide uniform bearing and support for the bottom quadrant of each section of the pipe. Pipe shall rest on bedding material along its entire length. For trenches in road sub-grades, common backfill above the bedding shall be placed in 12" lifts and compacted with special purpose compaction equipment. Compaction equipment shall be selected to avoid damage to the pipe. After other required tests have been performed and the trench backfill compacted to 2 feet above the top of the pipe, the pipe shall be inspected to determine whether significant displacement has occurred. This inspection shall be conducted in the presence of the COTR. Pipe sizes larger than 36 inches shall be entered and examined, while smaller diameter pipe shall be inspected by shining a light or laser between manholes or manhole locations. If, in the judgment of the COTR, the interior of the pipe shows poor alignment or any other defects that would cause improper functioning of the system, the defects shall be remedied as directed at no additional cost to the Government.

Trenching. Unless otherwise indicated, trench excavation shall be by open cut except that short sections may be jacked or bored if the utility can be safely and properly installed and ground loss can be properly controlled. All excavation shall be constructed in accordance with OSHA Standards (29 CFR 1926). Allowable trench widths, depths, side slopes, sheet and bracing requirements, and other considerations are given in the OSHA Standard.

Sewer Riser. The sewer riser shall be vertical and terminate no more than 4 inches above ground level with a standing wye (preferred method) at the staked location. The cleanout inlet will be plugged with a threaded cap. The vertical inlet shall be plugged or capped until such time as it is connected to the mobile home unit.

Deflection Test. Deflection test shall be made on the entire length of the installed pipeline after completion of all work including the leakage test, backfill, and placement of any fill, grading paving, concrete, or superimposed loads. Deflection shall be determined by use of a deflection device or by use of a spherical ball. A tolerance of plus 0.5 percent will be permitted. Installed pipe showing deflections greater than 7.5 percent of the normal diameter of the pipe shall be retested by a run from the opposite direction. If the retest also fails, the suspect pipe shall be replaced at no cost to the Government.

Roads and Unit Pads

References.

AASHTO - M147 - Materials for Aggregate and Soil-Aggregate.

ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.

ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures,Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8mm) Drop.

ASTM D1556 - Test Method for Density of Soil in Place by the Sand Cone Method.

ASTM D2487 - Classification of Soils for Engineering Purposes.

ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

ASTM D3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place Nuclear Methods (Shallow Depth).

ASTM D4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb (4.54 kg) Rammer and an 18-in. (457mm) Drop.

Local and State codes as applicable

Materials

The aggregates for the surface and base course shall meet State or Local Standards but generally shall have no more than 20% fines and no more than 80% passing the 1-3/4 inch sieve. A stabilization fabric or geotextile fabric will be required and this fabric shall be installed in accordance with manufactures recommendation. The Contractor is responsible to place the correct fabric based on the given soil characteristics.

Grading

During construction, the lines and grades, including crown and cross slope indicated for the base course, shall be maintained by means of line and grade stakes placed by the Contractor. Grade stakes shall be in lines parallel to the centerline of the area under construction and suitably spaced for string lining. The Contractor may use a laser system in lieu of a grade stake system. Adequate drainage shall be provided during the entire period of construction to prevent water from collecting or standing on the area to be constructed. The surface of the top layer shall be finished to grade and cross section shown. Finished surface shall be of uniform texture. Light blading during compaction may be necessary for the finished surface to conform to the lines, grades, and cross sections. Should the surface for any reason become rough, corrugated, uneven in texture, or traffic marked prior to completion, such unsatisfactory portion shall be graded.

Site grades shall be checked for low spots and depressions. All low spots and depressions shall be filled so the entire site has positive drainage. All material placed as fill or backfill shall consist of mineral soils with no vegetative matter or rocks larger than 3 inches in size. Unsuitable material shall be placed on site at a location directed by the COTR.

Compaction

All plant, equipment, and tools used in the performance of the work will be subject to approval and shall be maintained in satisfactory working condition at all times. The equipment shall meet the requirements of the referenced state standard specification sections. The base course shall be compacted using a steel-wheeled roller, vibratory smooth drum roller, or pneumatic-tired roller, unless other special compaction equipment is approved. During fill placement, each layer shall be spread uniformly in a maximum uncompacted lift thickness of 6 inches and compacted with a vibratory sheepsfoot roller until there is no further evidence of consolidation.

Finishing

The surface of the top layer shall be finished to grade and cross section shown. Finished surface shall be of uniform texture. Light blading during compaction may be necessary for the finished surface to conform to the lines, grades, and cross sections. Should the

surface for any reason become rough, corrugated, uneven in texture, or traffic marked prior to completion, such unsatisfactory portion shall be graded.

All topsoil and surface material shall be removed and the sub-grade compacted prior to the placement of the filter or geotextile fabric and aggregate base. There should be no evidence of depressions from site equipment or excess rutting.

Seeding species and rates must be specified that are compatible with local climate and soil conditions.

Electrical Distribution

The Contractor shall ensure that all electrical drawings are stamped by a professional engineer and reviewed and constructed by a licensed electrician.

References The publications listed below form a part of this scope of work to the extent referenced.

NSI C2 National Electrical Safety Code

NFPA 70 National Electrical Code

Extent of Service. The Contractor shall provide underground service from the metering pole to a conduit stub-out. The power company will provide and install all aerial distribution, including poles, metering and service disconnect. The Contractor shall coordinate the complete effort with the power company. The Contractor will connect the conduit to the trailer conduit and terminate the service lateral on the terminals of the mobile home interior electric distribution panel or mobile home junction box.

Coordination - The Contractor shall coordinate the installation with the serving utility. Before the system is energized, the Contractor shall be notified to verify all necessary

lockouts are in place, appropriate circuit breakers are off, and electric water heaters are full.

Codes for Distribution. The mobile home park electrical power distribution system shall be installed in accordance with all applicable requirements of the latest edition of the National Electrical Code (NFPA 70), including article 550 Part C, and the National Electrical Safety Code.

General Information

Mobile home service equipment shall be installed in accordance with NFPA 70 article 550-23.

There shall be no splices in the wiring between the load side of the trailer service disconnects and the line side lugs on the trailer load center.

All services shall be grounded according to NFPA 70, article 250. A ground shall be carried to each trailer panel.

Conduit shall be securely attached to the electrical boxes in accordance with NFPA 70. Sweeps shall be used at the mobile home junction box and meter loop assembly.

All exposed PVC conduit installed on poles shall be securely fastened with two-hole straps, a minimum of two per 5-foot length or fraction thereof.

Coordinate electric power distribution with electrical codes and configure for metering at each individual pad on the sites. The sites shall also be configured so common areas, including lighting and shelters, shall be metered separately from the individual pads.

The Contractor shall install all electrical items and connections for mobile homes in accordance with Federal, State, and Local Codes, and in accordance with manufactures recommendations.

Unit Installation

Blocking and Leveling for MH/PM and Travel Trailers

All units shall be set-up on concrete block piers. Block piers for all units shall consist of an arrangement of double blocks stacked in an alternating pattern. After the weight of the travel trailer is transferred to the piers, if the unit is not leveled properly the Contractor will reinstall the unit at no additional cost to the government.

The piers shall be installed in accordance with the manufacturer's installation instructions and based on the soil bearing capacity. The Contractor is responsible for determining the soil bearing capacity through contacts with local building officials, soils engineers or other methods acceptable to local authorities. The number and location of piers shall be in accordance with the manufacturer's instructions unless local codes provide for differing specifications that must be met. Note: The Contractor must have a licensed architect or professional engineer approval for manufactured homes and park model piers that are higher than 60 inches high, or in which more than 20 percent of the piers exceed 40 inches high.

The units shall be blocked and leveled to the manufacturer's specifications to include other appropriate guidance. As a minimum, the units shall have evenly spaced piers on each side and at least two piers shall be located behind the wheels on each side. (Note: the Contractor is responsible for ensuring proper installation of the unit and for verifying the requirements.)

The Contractor shall clean away all grass roots, loose dirt, rocks and debris at the base of the piers. The Contractor also shall provide a base for each pier. The approximate size of the base is 24" x 24" with double blocking. This may be wooden- 3/4 inch plywood or State and local approved ABS type pier pad, unless otherwise specified by state or local code. The piers will have at a minimum two solid cap blocks on the base and two solid cap blocks at the top of the piers

The pier installation must meet the manufacturer specifications and include the following FEMA requirements. FEMA requirements will take precedence when they exceed manufacturer's specifications.

After the weight of the unit is transferred to the concrete block piers, the piers must be vertically aligned and tightly shimmed with wooden wedges. If the piers are not vertical at the time of final inspection, they shall be removed and reinstalled by the Contractor at no additional cost.

The Contractor is responsible for all necessary re-leveling and re-blocking of the unit for a period of 90 days after final inspection.

Unit Anchoring and Securing

Anchor and Strap (Tie-Downs) MH. Anchoring and strapping for tie-down of manufactured homes shall be based on the HUD Part 3280 Manufactured Home Construction and Safety Standards for the appropriate Wind Zone of the unit and area the unit will be installed, and based on a soil bearing capacity and the local requirement.

NOTE: This is not a waiver of HUD, State, and local requirements. The units will be anchored appropriately to resist floatation, collapse, and lateral movement. The manufacturer's installation instructions and local requirements will be followed in determining the location and number of unit tie-down connecting points and method of securing the anchors.

The Contractor is responsible for determining the specific type anchors to be used and the method of securing the anchors based on the anchor manufacturer's instructions for soil bearing capacity of 1000 PSF, or the Contractor can determine local soil conditions pertinent to anchor pullout resistance through contacts with local building officials, soils engineers or other methods acceptable to local authorities Anchors must be capable for allowable loading and wind zone. Anchoring and Straps (TT)The Contractor shall install two (2) anchors per side (total 4).All anchors must be placed, driven, or augured so that the individual anchor will withstand a withdrawal pull with no more than two (2) inch vertical displacements.

The location of the straps shall be two on the tongue of the unit, and two on the back bumper of the unit. Each strap shall extend from one turnbuckle on the anchor head; wrap one time around the tongue or the back bumper, respectively, before being attached to the other turnbuckle on the anchor head.

Note: Alternatives may be used if the Contractor can provide the COTR with a current independent study by an appropriately licensed expert to support the conclusion that the alternative measure is equal to or exceeds requirements. The Contractor is responsible for ensuring it meets the applicable local requirements.

The strap shall be 1.25" X .035" cold rolled galvanized steel, as per Federal Specification QQ-S-781 G for Type 1 Class B, Grade 1 strapping. The anchor straps shall be snug and in a near vertical position.

Electrical Installation

The Contractor shall provide all electric work in compliance with all national, State, and local codes (National Electric Code (NEC)) and regulations from the electrical assembly to the temporary housing unit interior electrical distribution panel or junction box. The Contractor shall also meet the manufactures recommendation for each unit installed.

Air Conditioner Installation

The air conditioner hook-up will be in accordance with the manufacturer's specifications and installed by a certified heating and cooling technician.

The Contractor must obtain appropriate permits and meet all local codes and ordinances pertaining to the installation of the A/C unit.

The Contractor is responsible for supplying all the appropriate materials for this installation, with exception of the A/C unit.

The Contractor may be tasked to provide generators.

Battery

The Contractor shall furnish a battery for the travel trailer for transport only in the event that a TT is not so equipped. The battery provided will be used until power has been provided to the TT then removed by the Contractor

Sanitary Line Installation

At sites with sewer riser already installed, the Contractor will make the connection between the connecting point and the riser up to the sewer line. If a sewer riser is not in place, the Contractor will make an appropriate sewer tap on the sewer collection line and install the necessary piping and riser connection.

A clean-out fitting will be installed in an accessible location to facilitate snaking-out a clogged up line from the connection point, through the riser and into the main or service line. The pipefitting that attaches the sewer connection to the drain outlet of the manufactured home shall be threaded and screwed or installed with a removable adapter

for the drain outlet. The nominal inside diameter of the unit sewer connection shall not be less than three inches (3”). The slope shall be continuous and at least one-quarter inch (1/4”) per foot and no more than one-half inch (1/2”) per foot. Overhead (hanging) sewer straps shall be placed at four-foot (4’) intervals (maximum) to prevent any deflections. The fitting between the unit sewer line and sewer riser (placed above ground) will be comply with all appropriate plumbing, safety, and health codes and requirements. This includes:

An approved 4” x 3” adapter and the lower end of the unit sewer line shall extend at least four inches (4”) below the rim of the riser with an air tight connection provided by the use of a rubber ring. Pipe shall be an approved and appropriate rigid PVC sewer pipe. Absolutely no flex-hose allowed. The line shall be of the shortest practical length and include a clean-out “Y” that would allow cleaning and/or clearing of the line from and to the unit as well as from and to the connection or sewer drop point.

The Contractor shall test the sewer line for leakage, and any leaks shall be repaired at no additional cost. All sewer piping and installation shall be installed in accordance with local codes and the Uniform Plumbing Code. If the unit has multiple sewer drop points, they will be interconnected to a single unit drop point.

Municipal Sewer Tap-Install sewer tap

The Contractor shall excavate, install the tap, and connect to the sewer line from the unit and backfill, according to local requirements. The sewer tap shall be made in accordance with local regulations regarding sewer tap installations.

In the event the governing entity has a predetermined fee for sewer taps, such fee shall be paid by the Contractor and reimbursed at actual expense (individual receipt required).

Water Line Installation

Water piping and installation shall be installed in accordance with local codes and the Uniform Plumbing Code.

At sites with water service riser already installed, the Contractor will make the connection between the unit connecting point and the riser. If the water service riser is not in place, the Contractor will make an appropriate tap on the water service line and install the necessary piping and riser connection. A cut-off valve and a hose bibb with anti-siphon valve shall be located adjacent to the unit connecting point (must be in convenient location to facilitate shut-off of water to unit and make a watering hose connection)..

The Contractor shall test the service line for leakage, and any leaks shall be repaired at no additional cost.

Municipal Water Tap-Install Water Tap

The installation of the water tap (if required) will be accomplished in conjunction with, and according to the regulations of the local Water Company.

Bacterial Disinfection: Before acceptance of potable water operation, each unit of completed waterline shall be disinfected as prescribed by AWWA C651. After pressure tests have been made, the unit to be disinfected shall be thoroughly flushed with water until all entrained dirt and mud have been removed before introducing the chlorinating material. The chlorinating material shall be either liquid chlorine, calcium hypochlorite, or sodium hypochlorite, conforming to paragraph ”DISINFECTION”. The chlorinating material shall provide a dosage of not less than fifty (50) PPM. Valves on the lines being disinfected shall be opened and closed several times during the contact period. The line shall then be flushed with clean water until the residual chlorine is reduced to less than one (1.0) PPM. During the flushing period, each fire hydrant on the line shall be opened and closed several times. From several points in the unit, the Contractor will take samples of water in proper sterilized containers for bacterial examination. The samples will be taken to a state certified laboratory for examination. The disinfection shall be repeated until tests indicate the absence of pollution for at least two (2) full days. The unit will not be accepted until satisfactory bacteriological results have been obtained.

Water Line Winterization

When specified, the Contractor shall install freeze protection heating tapes and insulation to water supply piping and shut-off valves to prevent freeze-up of the system. The heat cable shall be installed in compliance with the cable manufacturer's instructions

Gas Installation

Install Complete Petroleum (LP) Gas System. The Contractor shall install a complete LP gas system. The installation must be made so that convenient recovery of the tank(s) is possible. The installation shall be in accordance with State and local codes. This line item shall be used for travel trailers, manufactured homes, park models, and other types of recovery activities as defined by the FEMA DHOPS Manager or designee. The entire system must be checked for leaks and repaired if any are found. The furnace orifice shall be converted to LP gas if necessary, pilot lit, unit cycled, and adjustments made.

Refill Propane Tanks. At the approval of the COTR, refill tanks with 100 gallons and inspect connections. This must be issued and approved by the COTR and coordinated with the FEMA DHOPS Manager or designee.

Natural Gas Connections

The connection shall be from the natural gas inlet on the manufactured home to the natural gas riser and/or extension (underground) from gas meter terminating with a riser in accordance with these specifications, State and local regulations. The supply connection shall completed be as required by Federal, State, and local codes.

Entrance and Exit Ways

All ramps, landings, and stair traffic surfaces shall be constructed of treated 5/4” X 6” or 2” X 6” lumber. No plywood shall be used for ramps, landings, or stairs.

The Contractor shall furnish and install steps at each unit entrance/exit. As a minimum, steps will be constructed of treated exterior grade framing lumber forty-eight inches (48”) wide between two (2) sanded and painted with one coat of white paint handrails. Riser height shall not exceed 7-3/4 inches and treads shall be not less than 9 inches. Treads less than 10 inches wide shall have a nosing or effective projection of approximately 1 inch over the level immediately below.

Entrance and Exit Components.

Furnish and Install Steps

The top step shall be constructed with a level platform such that the platform is centered on the door of principal entry into the unit and flush with the doorsill. The platform shall be 60" wide by 60" deep (long).Both handrails shall be constructed with 2” x 4” safety edge lumber, routed for gripping purposes, and shall be provided on all steps. All material requirements shall be in accordance with the applicable guidelines. Steps shall have a stable foundation, be level in both directions and anchored. The platform shall have a non-skid surface using materials that are State and Industrial approved (sand added to paint is unacceptable). The handrails shall surround the platform on all sides. Other materials for steps that are approved by the state and local code enforcement jurisdiction may be substituted with the COTR’s approval. The Contractor is responsible for providing the supporting documentation of the State and local approval. However this does not waive any safety requirements. If the steps present a safety hazard the Contractor shall build steps and platform appropriately.

Furnish and install ramp

The Contractor shall ensure the ramp is built and installed in accordance with the current Uniform Federal Accessibility Standards are available on the following website:

http://www.access-board.gov/ufas/ufas-html/ufas.htm. The contract shall prepare the grade and construct a wooden ramp with level platform, such that the platform provides a level area to the latch side of the door of principal entry into the unit and flush with the doorsill. Contractor shall coordinate ramp design with local authorities to ensure compliance with the current Federal accessibility requirements, State and local requirements as well as the safety of the occupant. The Contractor is responsible for researching the appropriate requirements and incorporating that requirement into the installation time lines.

The Contractor shall provide all supplies and materials. All wood shall be treated, exterior grade framing lumber and shall be used throughout, except for the platform and runway surface, which shall be 2” x 6” treated, exterior lumber. The handrail shall meet UFAS requirements. Nails shall be coated and sized consistent with industry standards. The overall length of the ramp and platform shall be fixed by the height above the grade of the unit sill and the distance to a suitable, firm surface, approach to the ramp. Suitable, firm surfaces shall be firm, stable, and slip resistant and appropriate for use by persons in wheelchairs (All types of wheelchair). For sites lasting up to six months, acceptable initial surface materials, when properly engineered, are asphalt, concrete, soil with stabilizer, crushed rock with mixed aggregate not exceeding 3/4" in size with stabilizer, and boardwalks. For sites lasting longer than 6 months, suitable surface materials are asphalt, concrete, or engineered boardwalks.

The ramp pitch shall be 1:12 maximum, which represents one inch (1”) of height maximum for each twelve inches (12”) in length and shall have landings at the top, bottom, and every 30 feet in length. Platforms must be 60-inch by 60-inch square. The Contractor may supply modular aluminum ramps that are compliant with applicable Federal accessibility standards in lieu of wood ramps provided they are acceptable the local authorities and comply with the foregoing requirements relating. The ramp shall be firmly supported on grade, with mud seals added where necessary because of soil conditions. The ramp and the platform shall have a non-skid surface using materials that are Industrial approved (sand added to paint is unacceptable).

Suitable site approach surfaces shall be firm, stable, and slip resistant and appropriate for use by persons in wheelchairs (All types of wheelchair). For sites lasting up to six months, acceptable initial surface materials, when properly engineered, are asphalt, concrete, soil with stabilizer, crushed rock with mixed aggregate not exceeding 3/4" in size with stabilizer, and boardwalks. For sites lasting longer than 6 months, suitable surface materials are asphalt, concrete, or engineered boardwalks.

Make Unit Ready for Occupancy

Clean and Make Unit Ready for Occupancy. Assemble Accessories and Arrange for Use:

- Arrange all furniture for occupancy.
- Clean and mount storm window panels.
- Install drawers.
- Remove window clips; travel blocking and protective taping.
- Hang fire extinguisher (report low charge to FEMA inspector).
- Mount exterior light fixtures, and install bulbs.
- Install interior light globes and covers.
- Install un-mounted screens.
- Re-install any fallen curtains.
- Install cabinet door panels and other knockout panels.
- Install commode tank lid and repair, if necessary, cabinet/door/drawer hardware.

The Contractor shall clean and test all appliances, components, and systems associated with the units to include but not be limited to plumbing, electrical, HVAC, exhaust fans, etc.

Activate Utility Systems and Make Minor Repairs (All parts changed must be of same quality.).Test water system and make minor repairs (i.e., tighten, adjust, or replace fittings, flare nuts, faucet washers, ball cocks, shower diverters, faucet sets, etc.); Verify hot/cold water lines, reverse if required.

Tighten or replace loose drain line connections (traps, strainer assemblies, etc.)/.Replace commode wax ring and tank gaskets, as needed.

Tighten loose connections in electrical system.

Test electrical circuits and replace bulbs, breakers, switches, or receptacles, as needed.

Test Appliances and Appurtenances

Activate, test and make any necessary minor repairs to the refrigerator, range, furnace, air conditioner, and water heater for proper operations.

Adjust pilots and burners, change orifices, water heater elements, etc., as needed

Test smoke detectors and replace if faulty. Smoke detector provided by FEMA upon receipt of damaged one

Test exhaust fans for proper operation, repair as needed.

Inspect the unit exterior.

Steps/ramps properly installed and secured with no safety hazard.

The unit is not under any electrical wires.

UFAS requirements incorporated.

The unit is not missing any siding.

The unit has no broken windows and/or doors.

The unit is properly blocked, anchored, and leveled.

The roof has been checked for leaking and/or damage.

There are no exterior water or sewer leaks.

There are no holes, trenches, or other safety hazards around the unit.

All piping has been properly secured and sloped.

Final Clean-Up and Readiness.

Units will be cleaned and inspected by the Contractor to ensure the unit is safe, sanitary and functional to the extent that the units are RFO. As part of this activity to make the

units RFO, all furniture, appliances, shelves, and cabinets shall be unpacked, cleaned, assembled, and made ready for use. The Contractor shall install two (2) FEMA-provided "living kits" in each MH. Prior to RFO, the Contractor shall operate AC unit for a minimum of two (2) hours and for as long as possible, up to twenty-four (24) hours to ensure proper function and reliability. Any system failures shall be reported to the COTR.

Modification of Units for Persons with Disabilities

The UFAS Units shall be installed in accordance with UFAS, and shall include ramps.

All improvements within the boundary of the site shall comply with UFAS whether or not it is expressly stated in this outline.

Provide at least one accessible route complying with UFAS from public transportation stops, accessible parking spaces, passenger loading zones and public streets or sidewalks to each accessible and visit-able dwelling unit and to each public and common use facility and element within the boundary of the site. (UFAS 4.3).

Place accessible dwelling units nearest public transportation and accessible parking and nearest any public and common use amenities within the boundaries of the site.

Do not cluster all accessible dwelling units into one area. (UFAS 4.1.1) Similarly, do not house persons with disabilities in clusters; provide housing in a setting that integrates households having persons with disabilities with households that do not have persons with disabilities.

Provide sufficient vehicular access ways for Para-transit vehicles (typically, lift-equipped vans) to stop within 200 feet of every accessible dwelling unit entrance.

All retail stores or other privately-operated businesses located on the site must be accessible in accordance with the requirements of Title III of the Americans with Disabilities Act., 42 U.S.C. 12182 and 12183.

Accessible routes shall be firm, stable, and slip resistant. (UFAS 4.5.1)

Acceptable initial surface materials, when properly engineered, are:

- Asphalt.
- Concrete
- Soil with stabilizer
- Crushed rock with mixed aggregate not exceeding 3/4" in size with stabilizer
- Boardwalks

For developments lasting longer than 6 months, replace the initial surface materials with asphalt, concrete, or engineered boardwalks as needed and directed by the COTR at no additional costs to the government.

Accessible routes must slope no more than 8.33%. Any portion of the accessible route that slopes more than 5% shall be constructed as a ramp, with handrails on sides, edge protection, and other ramp features. (UFAS 4.3.7).

Accessible routes must cross slope no more than 2%. (UFAS 4.3.7).

Accessible routes shall be at lest 3'-0" wide and have 5'-0" x 5'-0" passing areas every 200'. (UFAS 4.3.4).

Skirting of Manufactured Homes

The Contractor shall furnish and install vinyl skirting on the entire perimeter of a manufactured home or other type of pre-fabricated housing or structure in accordance with manufacturer's recommendations and all Federal, State, and Local Codes. The Contractor must supply all materials. All sewer, water, and electric feeds shall enter the MH from under the unit inside the skirting.

Staging Area Design & Construction

The Contractor shall construct all items in this section in accordance with Federal, State, and local regulations or codes. The Contractor shall also follow all applicable engineering design guidelines to ensure that all maintenance issues for the staging area a kept at a bare minimum. All items in this section shall be approved and accepted by FEMA DHOPS.

Before construction of the staging commences the Contractor may be required to complete all environmental documentation required by Federal, State, and Local Authorities. This may require but not be limited too NEPA, FONSI, NPDES, etc.

No construction activities can begin prior to acceptance of all environmental documentation unless waivers are obtained from the appropriate regulating agency.

The Contractor shall grade the site to prevent any standing water. The site shall be compacted to support the load of several mobile homes without sinking. The roads throughout the staging area shall be construction with filter fabric and a durable gravel to adequately meet the soil characteristics.

The Contractor will typically be required to install 8' chain link fencing around the perimeter of the staging area with appropriate entrance and exit gates as directed by FEMA. These gates are typically 16' in length each. The Contractor shall also provide lighting for the site by means of portable light plants or by connecting to existing service.

Other items that may be required include guard shacks, utilities for FEMA trailers, etc.

All items completed as mentioned above shall be in accordance with all Federal, State, and Local regulations or codes.