APPENDIX B

PROJECT UFGS SPECIFICATIONS LIST

AND

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(TO BE DEVELOPED BY THE D-B CONTRACTOR)

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SECTION 00 74 00

SPECIAL CONDITIONS
08/18

PART 1 GENERAL

1.1 PAYMENT

Separate payment will not be made for compliance with this or any other Division 00 or Division 01 specification. All costs associated with these specifications shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

1.2 DEFINITIONS

The following terms are used throughout the contract documents. Except where a definition is provided with the specific occurrence, the following definitions apply to these terms.

a. Host Nation. The country where the construction work is being performed.

b. Host Nation Language. The Official Language recognized by the national government of the country where the work is performed. If no Official Language has been designated, or where multiple Official Languages have been designated, it is the predominant language of the Government agency responsible for operation and maintenance of the facility or product constructed under this contract.

1.3 ORDER OF PRECEDENCE

in the event of conflict or inconsistency between any of the provisions of this contract, precedence shall be given in the following order:

(1) Clause 52.236-21 Specifications and Drawings (Alt I)

(2) Any portions of the accepted proposal that both conform to and exceed the provisions of the solicitation (Betterments).

(3) Any portion of a contractor provided deliverable (including, but not limited to, plans, specifications, engineering studies and analyses, shop drawings, equipment installation drawings) that both conforms to or exceeds the provisions of the contract (Betterments). All deliverables must conform to all provisions of the contract, in the order of precedence herein.

(4) Contract Sections starting with "00", including these Special Conditions

(5) Section 01 00 00, including Section 01 10 10 Statement of Work (Summary of Work or Scope of Work)

(6) All Other Specification Sections

(7) Special Requirements or Special Technical Requirements

(8) Referenced Standards

(9) Referenced Design Guides or other non-technical standards

(10) Referenced Drawings

(11) All other technical attachments to the contract, including Host Nation Technical Requirements, Standards, and References.

Amendments shall take precedence over all items listed above to the extent noted above and in the referenced clauses. For instance an amendment to a Drawing takes precedence over the original drawing but not over the Special Technical Requirements.

Design and product requirements, including criteria are minimum requisites. In case of conflicting requirements within documents of the same order of precedence (e.g. specifications reference a standard which requires a more stringent criteria than the specification), the more stringent criteria shall govern. A conflict does NOT exist when both requirements can be met; in these instances the contractor shall comply with both requirements.

1.4 Documents in Multiple Languages

The English language version of any document shall govern over any version produced in other languages. In the event contract documents contain translations into non-English languages, the translation is provided solely for convenience.

For all purposes, the English language version shall be the governing instrument and understanding of the parties. In the event of any conflict between the English language version and any translation into any other language, the English language version shall govern and control.

1.5 COMMUNICATION IN ENGLISH

1.5.1 English Speaking Representative

All personnel required to communicate with the government on a recurring basis, including but not limited to Project Managers, Site Safety and Health Officers (SSHO), Superintendents, and Quality Control personnel shall be capable of explaining the work operations and receiving instructions in the English language whenever work is ongoing. This includes the ability to speak, read, write, and understand the directions of the Contracting Officer or their designated representatives when conducted in English.

1.5.2 Correspondence And Documentation

In addition to clause 252.225-7041, it shall be the responsibility of the Contractor to prepare all documents related to this contract, to include, change proposals, shop drawings, submittals, quality control reports, computations, and all correspondence, in the English language or with a translation of the original document into English.

1.5.3 Translations for Disputes

All documents originally produced in a language other than English submitted either as part of a claim under the Disputes clause or as part of

litigation, including actions at the ASBCA or actions in U.S. courts, shall be translated into English by a person who is recognized in accordance with the appropriate authorities to produce official/certified translations, and said translations shall be so certified.

This requirement applies to any document that would normally be considered to be within the scope of discovery in an ASBCA or court proceeding concerning the dispute. The term 'documents' includes electronic documents including but not limited to e-mail and includes documents generated by subcontractors or suppliers. In the event a dispute results in litigation, including actions at the ASBCA or actions in U.S. courts, the contractor will be responsible for providing translations of any documents that are within the scope of a discovery request filed by the U.S. Government and for providing certified translations upon request by the U.S. Government.

The contractor shall bear sole responsibility for any costs associated with translation, as well as with any errors, omissions, or discrepancies between the original and English version of a document. In the event of any difference between the English version and any other version in any language, the English version shall govern.

1.5.4 Additional Language Requirements

When any worker on site at any level (contractor, subcontractor, supplier, etc.) cannot communicate in English or a language spoken by the Contractor's key personnel, the contractor shall ensure that, at all times that person is on site, at least one person is present who can communicate to that worker in their native language. Failure to comply with this requirement will be considered a life-safety issue.

1.5.5 Language Fluency

Personnel required to communicate with the Government should be competent in the English language at a minimum level B2 of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment.

The Contracting Officer shall have the right to determine without appeal of such decision, whether the proposed representative has sufficient technical and lingual capabilities and the Contractor shall immediately replace any individual not acceptable to the Contracting Officer.

1.6 PERMITS AND RESPONSIBILITIES

As incorporated herein, the requirements of FAR clause 52.236-7 extend to licenses, permits, and compliance with applicable Host Nation (HN) and local laws, codes, and regulations in connection with the prosecution of the work, including, but not limited to, those identified below.

All documents identified in this paragraph (and sub-paragraphs) shall be prepared by the Contractor in HN and English languages and submitted to the Contracting Officer.

The Contractor shall obtain approval and signatures as needed for HN permitting and notification process from the COR. The contractor shall provide the required documentation sufficiently in advance of the date any approval or permit is required. The contractor is solely responsible for determining the amount of time the HN authorities will require to review and process the documentation. No additional time will be granted for delayed approval or rejection of contractor prepared documents. A copy of

all Approved Permits shall be furnished to the COR prior to the start of construction work.

1.6.1 Design-Build Projects Located in Germany

1.6.1.1 Art. 30 ABG 75 Permits

The contractor shall obtain all permits not required to be requested or obtained by the U.S. Government in accordance with FAR 52.236-7, Permits and Responsibilities.

Where the U.S. Government is required to obtain permits in accordance with Art. 30 of the ABG 1975, the Government will notify the contractor and the contractor shall prepare all necessary documentation. This includes providing documentation to show compliance with permit requirements.

1.6.1.2 ABG 7B Documentation

After award of the contract the Contractor will coordinate with the German Government, in conjunction with the U.S. Government , the requirements for proper final inspection by the German Government (ABG 7B) and provide any information required for the ABG 7B.

1.6.2 Design-Build Projects in All Countries Other than Germany

1.6.2.1 Permits and Notifications

The contractor shall obtain all permits not required to be requested by the Government in accordance with FAR 52.236-7, Permits and Responsibilities. The contractor is responsible for identifying and providing a comprehensive List of Required HN Permits.

Where the U.S. Government is required to obtain permits in accordance with Host Nation (HN) agreements, the Government will notify the contractor and the contractor shall prepare all necessary documentation. This includes providing documentation to show compliance with permit requirements.

1.6.2.2 Final Acceptance

Where final acceptance by the HN is required, the Contractor will coordinate with the HN Government, in conjunction with the U.S. Government, to determine the requirements for proper final inspection by the HN and provide any information required for proper final acceptance. The contractor shall incorporate the requirements for final acceptance into the design and construction of the project.

1.7 CONTRACTOR WORKFORCE

1.7.1 Foreign Employees

The contractor may arrange, through the appropriate Host Nation Government (HN) offices, to bring into the country nationals of third countries (TCN) having diplomatic relations with the host nation for purposes of employment in carrying out this contract work.

Contractors shall be responsible for timely and complete submittal of the necessary information and forms directly to the appropriate HN agency for the required customs clearances, passports, visas, licenses, or permits.

The contractor shall be responsible for the sponsorship of its employees and their dependents and shall process said permits directly with the appropriate HN agency. Offerors are advised that the HN reserves the right to limit access to designated security areas and refuse entry or employment of specified individuals, or to require their departure from the country, in accordance with national or local law and practice.

The U.S. Government does not have influence over the TCN issue and does not warrant the availability of TCN labor. The Contractor is cautioned to review any additional information specified elsewhere in this contract for more stringent requirements or specific restrictions or limitations on the use of foreign workers.

1.8 CONTRACTOR OBLIGATION

Contractors shall be responsible for timely and complete submittal of the necessary information and forms directly to the appropriate HN agencies for the required customs clearances, passports, visas, licenses, or permits.

1.9 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Art. 30 ABG 75 Permits; G
List of Required HN Permits; D
Permits And Notifications
Approved Permits

SD-11 Closeout Submittals

ABG 7 Documentation
Final Acceptance

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 SITE ACCESS

3.1.1 General Access Requirements

The Contractor shall be responsible for obtaining access and adhering to all guidelines established by the local authorities for access to the work site and will be responsible for the daily access of their personnel and subcontractor workers.

The Contractor is cautioned to review any additional security guidelines

specified elsewhere in this contract for more stringent requirements or specific access conditions.

3.1.2 Work on Military Installations

When work is performed on a military installation, every employee of the prime contractor, all subcontractor employees, and all material suppliers' employees, who require access to the installation for any reason and for any length of time will be required to obtain an installation/base access pass.

Individuals who will be performing work onsite for five or more days in total - even if non-consecutively - shall apply for installation/base pass and may not be "signed in" or otherwise presented as a "visitor". Failure to comply with this requirement may result in the loss of sign-in privileges and/or loss of installation access.

3.1.3 Access to Operational Areas

Contractor personnel are expressly prohibited and shall be restricted from entering operational buildings or areas without the specific authorization of the Contracting Officer. To perform work, where "security escorts" are required for access to a facility, the Contractor shall coordinate with the Contracting Officer for access to such facilities.

3.2 COMPLIANCE WITH HOST NATION RULES AND CUSTOMS

3.2.1 Access to Areas Under Military Control

The laws of the Host Nation (HN) may prohibit access to certain areas of the country which are under military control. Clearances to access these areas must be obtained from the HN. It is understood that areas to which rights of entry are provided by the HN are to be used only for work carried out under the contract and no destruction or damages shall be caused, except through normal usage, without concurrence of the HN.

3.2.2 Contractor Responsibility

The Contractor shall be responsible for providing the necessary information (such as but not limited to, names of personnel, type, and amounts of equipment, dates and length of time required at the site, and purpose of entering the HN) to the appropriate HN representatives, both civilian and military.

The following items are the sole responsibility of the Contractor to investigate, estimate as to cost, and assume the risk, as normally encountered by Contractors. The Contractor shall be responsible for determining the effect of the following on his own cost of performance of the contract and for including sufficient amount in the contract price:

a. Official language and type of accounts required to satisfy the officials of the Local Government.

b. Entry and exit visas, residence permits, and residence laws applicable to aliens. This includes any special requirements of the Host Government, including those required by local Labor Offices, which the Contractor may have to fulfill before an application for visas will be accepted.

c. Passports, health and immunization certificates, and quarantine clearance.

d. Compliance with local labor and insurance laws, including payment of employer's share of contribution, collecting balance from employee and paying into insurance funds.

e. Strikes, demonstrations and work stoppage.

f. Collection through withholding and payment to local Government, of any HN income tax on employees subject to tax.

g. Arranging to perform work in the HN, to import personnel, to employ non-indigenous labor, to receive payments and to remove such funds from the country.

h. Operating under local laws, practices, customs and controls, and with local unions, in connection with hiring and firing, mandatory wage scales, vacation pay, severance pay, overtime, holiday pay, days of rest or other non-work days, legal notice or pay in lieu thereof for dismissal of employees, slowdown and curtailed schedules during religious holidays, and ratio of local labor employed in comparison to others.

i. Possibility of claims in local bureaus, litigation in local courts, or attachment of local bank accounts.

j. Compliance with workmen's compensation laws and contributions into funds. Provisions of necessary medical service for Contractor employees.

k. Special license required by the local Government for setting up and operating any manufacturing plant in the HN, e.g. concrete batching, precast concrete, concrete blocks, etc.

l. Sales within the HN of Contractor-owned materials, and equipment.

m. Special licenses for physicians, mechanics, tradesmen, drivers, etc.

n. Identification and/or registration with local police of imported personnel.

o. Stamp tax on documents, payments and payrolls.

p. Base passes for permanent staff, day laborers, motor vehicles, etc.

q. Compliance with all customs and import rules, regulations and restrictions, including, but not limited to, local purchase requirements.

3.2.3 Archaeological and Historical Sites

The contractor shall be aware of all archeological laws and work accordingly including stopping work in the vicinity and reporting should archeological items be uncovered during the course of this contract.

3.3 CONTRACTOR LIAISON AND COMMUNICATION WITH HOST GOVERNMENTS

All communication by the Contractor with all officials, representatives and/or offices of the Host Government (at any level) in all matters

pertaining to the design or construction of this contract, shall be through and in full liaison with the Contracting Officer. This does not relinquish Contractor responsibility for obtaining routine items to conduct day-to-day business, such as visas, permits, and custom clearances.

The contractor is further reminded that only the Contracting Officer or their authorized representative may give the contractor direction in regards to contract interpretation. Only a Contracting Officer or Administrative Contracting Officer may modify the contract terms or conditions: directions received from Host Nation Government officials do not constitute direction to proceed in accordance with the Change clause and will not be considered a change to the contract without prior specific direction from the Contracting Officer.

-- End of Section --

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 74 01

TIME EXTENSIONS FOR ADVERSE WEATHER (NAU)

03/18

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SECTION 00 74 01

TIME EXTENSIONS FOR ADVERSE WEATHER (NAU)
03/18

PART 1 GENERAL

1.1 DETERMINATION OF ADVERSE WEATHER

This provision specifies the procedure for determination of time extensions for adverse weather in accordance with the contract clause 52.249-10 "Default: (Fixed Price Construction)". In order for the Contracting Officer to award a time extension under this clause, all of the following conditions must be satisfied:

a. The weather experienced at the project site during the contract period must exceed the baseline weather identified below during any given month.

b. The weather must actually cause a delay to the completion of the project or any specified contractual milestone. The delay must be beyond the control and without the fault or negligence of the Contractor.

c. The delay must occur during the contractual performance period. Weather delays occurring after the required completion date, prior to Notice to Proceed, or during other non-working days are not excusable under the Defaults clause.

1.2 BASELINE ADVERSE WEATHER DAYS

1.2.1 Baseline Weather Delay Days

The following schedule of monthly adverse weather delays will constitute the baseline for monthly weather time evaluations.

BASELINE ADVERSE WEATHER DELAY WORK DAYS BASED ON A FIVE (5) DAY WORK WEEK											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Projects Located in Africa											
0	0	0	0	0	0	0	0	0	0	0	0
Projects Located in Israel											
5	5	4	1	0	0	0	0	0	1	3	5
All Other Locations											
8	6	7	6	5	5	5	4	4	6	7	8

1.2.2 Adjustment for Other Than 5 Day Work Week

Monthly baseline adverse weather delays shall be adjusted proportionately

when the actual work week be based on more or less than 5 work days (i.e. if a 6 day work week, the baseline adverse weather delay work days for a month would be adjusted by multiplying the number shown above by 6/5). Any fractional amount will be rounded to the nearest whole number (e.g. 4.1 will round to 4 and 4.6 will round to 5).

1.2.3 Incorporation in Project Schedule

The Contractor's progress schedule must reflect these baseline adverse weather delays in all weather dependent activities. Refer to Section 01 32 01PROJECT SCHEDULE (NAU) or Section 01 32 16 SMALL PROJECT PROJECT SCHEDULES (NAU) for the procedures for incorporating the baseline adverse weather days into the schedule.

1.3 WEATHER CONDITIONS AT THE PROJECT SITE(S)

The Baseline Adverse Weather Delay Work Days identified above are an administrative baseline only and do not represent the actual weather conditions to be expected at the site. No inference or conclusion shall be made regarding the actual weather conditions or the actual amount of weather delays to be anticipated based on this baseline.

The Contractor shall, prior to submitting a proposal or offer, be solely responsible for determining the actual weather conditions prevalent at the project site or sites and accounting for this information in their proposal or offer.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 REPORTING

Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract performance period, the contractor will record on the CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Impacted activities shall be identified by name and activity id on the CQC report.

When the use of RMS-CM (Section 01 45 01 RESIDENT MANAGEMENT SYSTEM - CONTRACTOR MODE) is required by the contract, adverse weather days shall be reported on the QC Report in RMS-CM and tracked therein.

3.2 OCCURRENCE OF ACTUAL DELAY

To be considered a day of actual weather delay, progress on critical path activities must be less than 50 percent of the progress scheduled to occur on that day, and the progress must be impacted due solely to the adverse weather.

3.3 CALCULATION OF ACTUAL DELAY AND CONVERSION TO CALENDAR DAYS

The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. Any fractional amount will be rounded to the next whole number (e.g. 4.1 will round to 5).

This calculation is performed automatically within RMS-CM under the "Weather Delays" screens of the QA/QC Module, and shall serve as the basis for the calculation when RMS-CM is required by contract.

3.4 ISSUANCE OF MODIFICATION

If the number of actual adverse weather delay days exceeds the number of days identified in paragraph 1.2, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause 52.249-10 entitled "Default (Fixed Price Construction)".

Modifications will normally be issued no more than quarterly (once every three months) when actual weather delays exceed the baseline and will identify, by month, the applicable time extension. When the actual weather delays do not exceed the baseline for all months in a quarter, no modification will be issued but will be included in the next quarterly weather modification.

3.5 DELAYS BEYOND REQUIRED COMPLETION DATE

When the contract performance period, or any extension thereof, has passed, no extensions for unusually severe weather will be granted.

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 00 74 18

SUPPLEMENTAL CONDITIONS FOR PROJECTS IN ROMANIA (NAU)

03/18

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SECTION 00 74 18

SUPPLEMENTAL CONDITIONS FOR PROJECTS IN ROMANIA (NAU)
03/18

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-11 Closeout Submittals

Construction Book; G

1.2 SECURITY VETTING

1.2.1 Applicability

Paragraph 1.2 and its associated subparagraphs are applicable to all projects where work is performed on a Romanian military installation, to include areas located within Romanian installations which are otherwise under the control of the US Forces.

When this paragraph is applicable, Romanian authorities will conduct a security vetting of all contractors, subcontractors, and their personnel.

1.2.2 Security Vetting Levels

The security vetting is broken down into four levels, depending on the facility where work is to be performed. The contract will identify the security authorization level required.

The terms for issuing the industrial security authorization or facility security clearance are:

Level I security vetting - industrial security authorization; 60 calendar days shall be allowed for the vetting process

Level II security vetting - confidential facility security clearance; 90 calendar days shall be allowed for the vetting process

Level III security vetting - secret facility security clearance; 120 calendar days shall be allowed for the vetting process

Level VI security vetting - top secret facility security clearance; 180 calendar days shall be allowed for the vetting process

1.2.3 Company Information

The following information shall be provided for all contractor and subcontractors who will have access to any contractual document or require

access to the project sites. Information shall be provided in full text (without abbreviations):

a. Name of company in the country of origin

b. Contact information of company in country of origin

c. Name of the representative/branch in Romania

d. Country of origin

e. Registration number of company in country of origin

f. Romanian address and contact data of company

g. Registration number from Romanian National Office of Commerce

h. Unique fiscal identity code in Romania

i. United States Contracting Agency (granting contract)

j. Prime Contractor (for subcontractors)

k. General purpose of contract

l. Period of contract performance

m. Approximate number of personnel working on the base

1.2.4 Personal Data for Employees

The following information shall be provided for all contractor and subcontractor employees who will have access to any contractual document or require access to the project sites. Information shall be provided in full text (without abbreviations):

a. Given name and surname

b. Personal numeric code*

c. Date and place of birth

d. Gender

e. Citizenship

f. ID number or serial number of personal identity card or passport number

g. Employer's complete name

h. Country of origin of the employer

i. Employer's contact data

j. Employer's registration number from National Office of Commerce Registry

k. Position

l. Purpose of the visit (type of work to be performed)

m. Place of performing the work on the Base

n. Period of stay on the Base (intended arrival and departure dates)

o. Scanned copy of the stay permit (Romanian Visa)**

p. Registration number of the individual's working contract and period of performance

* only required for Romanian citizens
** only required for non United States citizens and citizens of countries which are not members of the European Union

1.2.5 Submission of Data

The information identified in paragraphs 3.3.1 and 3.3.2 shall be provided electronically in a tabular format. Paper copies will be provided if so requested. The specific procedures for transmission and communication of the data will be provided by the cognizant Romanian authorities.

Employee information shall be grouped into four separate tables as follows:

1. Citizens of the United States of American (including those holding nationality in other countries)
2. Romanian citizens
3. non-Romanian citizens of European Union member countrie
4. Citizens of countries other than Romania, the United States of America, and the European Union

1.3 MILITARY INSTALLATION ACCESS PROCEDURES

Access to military installations is controlled by the various Armed Forces of Romania and contractors must comply with the requirements for access established by the installation commanders. The US Government does not maintain control over the access procedures and does not warrant access for any individual or groups of individuals.

The contractor shall be responsible for coordinating with the installation commander to identify the general format and requirements of the letter and allow a minimum of 10 calendar days for the government to prepare the letter. This time period shall be in addition to any time periods indicated elsewhere in the contract.

1.3.1 Alteration of Procedures

Base access and security requirements may be altered by the Romanian authorities at any time. The contractor shall have no recourse as to costs or time extensions for any delays resulting in changes to access and/or security requirements.

1.3.2 U.S. Government Support

1.3.2.1 Limitation of U.S. Government Liability

The U.S. Government will not accept liability or responsibility for granting access to the installation, nor shall it be responsible for

coordination of approval.

1.3.2.2 Assitance by the Government

When requested by the contractor, the government may assist the contractor in obtaining access by providing a letter of introduction or other similar document to meet the requirements of the installation commander which will identify the contractor's personnel or vehicles as being employed on the project site and requiring access.

The government shall not warrant or otherwise provide good conduct certifications or other verifications of the background or suitability of the contractors personnel.

1.3.3 Contractor Non-Compliance

Should the contractor fail to comply with the rules and regulations established by the installation commander, they, or their employees, may be barred from the installation. If, as a result, the contractor is unable to perform, the government may determinate that the contractor is in default of the contract.

1.3.4 Vehicle Access

All vehicles requiring access to the installation, including delivery vehicles shall be registered or otherwise approved for use on the installation by the base commander

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 PERSONNEL ACCESS REQUIREMENTS

3.1.1 General

Anyone requiring access to the installation, including delivery drivers, construction workers, and administrative personnel, must have an installation access pass or other documentation granting them access to the installation. In general, all persons requiring access must already have legal permission to work in the country before a request for access may be submitted.

3.1.2 Minimum Processing Period

Requests for installation access must be made at least 30 calendar days prior to the anticipated date access will be required. Requests made with less than 30 days notice may be disallowed.

Where Security Vetting is required (see Paragraph 3.3), this Processing Period will not start until after Security Vetting has been completed.

3.2 CONSTRUCTION BOOK FOR HN

Upon acceptance and completion of construction, the contractor shall prepare a Construction Book. The Construction Book shall be submitted to the COR for transfer to the Romanian Ministry of Defense and contain the

following information:

a. Final set of completed As-Builts Drawings

b. Specific details of any structural modification made after the start of construction.

c. A record of significant weather events (i.e. flooding, earthquake, fire, severe temperatures) that occurred during construction, if any.

d. O&M manuals, instructions, and training for the operation of installed equipment

All documents shall be provided in the Romanian language.

3.3 Value-Added Tax (VAT) Procedures

VAT and excise tax exemption for articles and services acquired by contractors acting for or on behalf of the United States forces shall be granted at the point of sale.

The acquisition of articles and services acquired free of tax shall be documented using an agreed form. Such form shall be validated by United States forces authorities and presented to an appropriate Romanian fiscal authority, which shall immediately certify it.

The contractor (to include subcontractors) shall provide the form to the vendor in order to obtain relief at the point of sale. No relief may be obtained at any other time.

3.3.1 Obtaining the VAT Exemption by the Contractor

3.3.1.1 Number of Copies and Attached Information

The VAT form must be done in 4 copies. Attached to each copy must be a copy of the contract or an order for supply. In case of large contracts the contractor shall obtain from the COR a memorandum certifying the reality of the information from the VAT form. Every VAT form must have attached one of the above mentioned documents, in order to be certified by the competent authority of the host member state, DGFP C-TA.

3.3.1.2 Completion of the VAT Form

Complete the VAT form as follows:

Box 1: Institution, name, street, number, area post code, place, host member state, place

Box 2: Full name and position of the COR

Box 3a: US Department of Navy

Box 3c: Place, date, name, position and signature of the COR

Box 4: blank

Box 5A: Name and address of the contractor, state, registration code for VAT purposes

Box 5B: Number of the contract, detailed description of goods and/or services, quantity or number, value per unit, total value, currency

Box 6: blank

Box 7: Completed and stamped by the attorney.

3.3.2 Obtaining the VAT Exemption by Subcontractors

The VAT form must be done in 4 copies. Attached to each copy must be a copy of the contract or an order for supply.

Completion of the VAT Form

Complete the VAT form as follows:

Box 1: Contractors information:, name, street, number, area post code, place, host member state, place

Box 2: Full name and position of the contractors respresentative

Box 3a: US Department of Navy

Box 3c: Place, date, name, position and signature of the contractors respresentative

Box 4: blank

Box 5A: Name and address of the subcontractor, state, registration code for VAT purposes

Box 5B: Number of the contract, detailed description of goods and/or services, quantity or number, value per unit, total value, currency

Box 6: blank

Box 7: Completed and stamped by the attorney.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 30 00

GENERAL REQUIREMENTS (NAU)

06/18

-- End of Section Table of Contents --

SECTION 01 30 00

GENERAL REQUIREMENTS (NAU)
06/18

PART 1 GENERAL

1.1 PURPOSE

This specification is intended to be read in coordination with the following Division 01 specifications:

01 32 01 PROJECT SCHEDULE or 01 32 16 SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES which establish the requirements for Project Schedules. Only one of these specifications are part of the contract: refer to the contract documents to determine the applicable section.

01 33 00 SUBMITTAL PROCEDURES which require the contractor to develop a submittal register and provide transmittals to the Government using the procedures defined therein.

01 35 26 SAFETY REQUIREMENTS which require the contractor to develop written procedures and implement a Safety Program for work performed under this contract.

01 45 00 QUALITY CONTROL (QC) which requires the contractor to develop written procedures and implement a system to monitor and ensure conformance of their work with the contract requirements. This specification establishes the minimum requirements necessary to comply with FAR 52.246-12 Inspection of Construction which is incorporated by reference.

01 45 01 RESIDENT MANAGEMENT SYSTEM - CONTRACTOR MODE (RMS-CM). This specification requires the use of RMS-CM for the implementation of many aspects of the contractors Quality Control program and for communication with the Government.

01 45 05 CONTRACTOR SITE PERSONNEL REQUIREMENTS or, for Job Order Contracts (JOCs), 01 45 06 JOB ORDER CONTRACT (JOC) CONTRACTOR SITE PERSONNEL REQUIREMENTS. Section 01 45 06 is applicable only to JOC's, for all other contracts 01 45 05 applies. This specification identifies the minimum personnel required to be provided by the contractor to implement the Quality Control requirements of Section 01 45 00 and the Safety Requirements of Section 01 35 26.

This specification provides general requirements which the contractor shall follow during the execution of the work. As they are general in nature, any specific requirements identified in other portions of the contract, regardless of location, shall be considered to take precedence in the event of a conflict. In this context, a conflict exists only when both requirements cannot be met; if both can be met there is no conflict and the contractor shall comply with both requirements.

1.2 DESIGN-BUILD LANGUAGE

The specifications identified in paragraph PURPOSE have been developed for both design-build and design-bid-build projects. References in these specifications to "design" are not applicable to design-bid-build projects and to all Job Order Contract (JOC). Nothing in the aforementioned specifications shall be interpreted to require design effort unless required by other contract documents.

Notwithstanding the above, design related activities, including extensions of design and shop drawings, required to perform the work and comply with other technical requirements are considered part of this contract and shall be included in the contractors pricing without separate or additional payment.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Pre-construction photos;
Mobilization Plan; G
Environmental Protection Plan; G
Traffic Control Plan; G
Construction Fence/Screening; G

1.4 DEFINITIONS

The following definitions apply to terms as used in the sections identified above in paragraph 1.1. These definitions shall not change or infer a meaning in any other document made part of this contract either directly or via reference.

Fugitive Dust. Solid particles generated by the forces of wind or machinery acting upon materials exposed as a result of the contractors operations

Installation. The entity considered to be the legal owner or authorized user of the location of the construction work.

Project. A "Project" is a single task or delivery order under an Indefinite Delivery, Indefinite Quantity award, including Job Order Contracts (JOC's) and Multiple Award Task Order Contracts (MATOCs). For all other contracts, it refers to a single contract award.

Superintendent. The highest level manager responsible for the overall construction activities on a project, including quality and production. The Superintendent maintains a physical presence at the site at all times work is being performed and is responsible for all construction and related activities at the site, except as otherwise acceptable to the Contracting Officer.

Site. The location where construction work physically occurs. On a single project, when construction work occurs at more than one location, and the locations are geographically separated by more than 5 kilometers (as measured via travel distance), they are considered separate sites.

1.5 NO WAIVER BY GOVERNMENT

The failure of the Government, in any one or more instances, to insist upon the strict performance of any of the terms of this Contract or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon such terms or option on any future occasion.

1.6 PUBLIC RELEASE OF INFORMATION

1.6.1 Prohibition

There shall be no public release of information, documents, or photographs concerning any aspect of the materials or services relating to this project without the prior written approval of the Contracting Officer.

1.6.2 Subcontracts and Purchase Orders

The Contractor agrees to insert the substance of above paragraph "Prohibition" in each subcontract and purchase order generated for this contract.

1.7 PERSONNEL AND SUBCONTRACTORS

1.7.1 Removal for Non-Compliance

All Quality Control, Safety, Superintendents, and contractor/subcontractor personnel are subject to dismissal and removal at any time based on the sole discretion of the Contracting Officer for non-compliance with the contract requirements.

Furthermore, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders is acceptable as the subject of claim for extension of time for excess costs or damages by the Contractor.

1.7.2 Substitution and Replacement

Any in-house personnel, subcontractors, and outside associates or consultants identified in the Contractor’s proposal shall not be replaced or changed without the Contracting Officer's prior written consent.

1.7.3 Qualifications

When qualifications require experience or “related experience”, the experience must be on projects of the same type and nature as the work identified in the project scope of work, and be on contracts with the government of the United States of America, either with the US Army Corps of Engineers or Department of Defense agencies. References and experience must be sufficiently detailed to allow for verification of experience. The Contracting Officer shall have final authority on determining the relevance of any experience submitted.

1.7.4 Employment

Should the continued employment of any person in connection with this contract, or any subcontract hereunder, be deemed by the Contracting Officer to be prejudicial to the interests of the Government, that person shall immediately be removed from the work site. In this connection the Contractor agrees that:

a. Cases which may involve disciplinary action against such persons, or the necessity of reassignment or termination of their services, shall be investigated, processed, reported and disposed of, as directed by the Contracting Officer.

b. Employment contracts of all persons employed in connection with this contract or any subcontract hereunder shall include clauses containing the substance of this section.

1.8 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual

1.9 REFERENCED STANDARDS

1.9.1 Version and Date of Standard

The contract documents make various references to Host Nation and US standards, including Unified Facilities Criteria (UFC) and design guides. When a specific version (e.g. "UFC x-xxx-xx, with Change yy") or date is identified in the reference, that specific version of the reference will apply. Where no date or version is specified, the version applicable to the contract shall be the earlier of either:

1. The date of the initial Request for Proposal (RFP) or solicitation for the project. For a MATOC, JOC, or other delivery order type contract, the RFP date refers to the date indicated on the RFP letter for the task order.

2. The date identified on the title page of Section 01 10 10 Statement of Work.

Generic language, such as "the most recent version" or "the most current version" shall be interpreted as indicated above.

1.9.2 Host Nation Standards

Where reference is made in the contract to Host Nation Standards, including, but not limited to those issued by the Deutsches Institut für Normung e.V. (DIN; in English, the German Institute for Standardization) and The European Committee for Standardization or Comité Européen de Normalisation (CEN) (EN Standards), whether such standards are incorporated into the contract in full text or by reference, the standard applies only

to establish a technical standard or level of performance or quality and does not create substantive rights under the contract.

All costs required to comply with these standards shall be included in the bid price, including the performance of any additional work, such as "associated" and "special" tasks. Notwithstanding any language in any standard, the requirement to provide any necessary material, item of equipment or work, rests with the contractor unless another contract provision clearly states that such will be government furnished.

When referenced standards within the same Order of Preference are in conflict with each other (such as when a US Standard conflicts with a European or Host Nation standard within the same specification section), Host Nation Standard shall govern unless otherwise specified within the contract documents. A conflict does not exist when standards require separate methods or performance and both are achievable. In these situations, the contractor shall comply with both standards.

1.10 PRECONSTRUCTION CONFERENCE

After award of the contract but prior to commencement of any work at the site, meet with the Contracting Officer to discuss and develop a mutual understanding relative to the administration of the contract, including quality and safety programs, preparation of the schedule of prices or earned value report, shop drawings, and other submittals, scheduling programming, prosecution of the work, and clear expectations of the "Interim DD Form 1354" Submittal. Major subcontractors who will engage in the work must also attend.

1.11 PARTNERING

To most effectively accomplish this contract, the Government requires the formation of a cohesive partnership within the Project Team whose members are from the Government, the Contractor and their Subcontractors. Key personnel from the Supported Command, the End User (who will occupy the facility), Subject Matter Experts, the Installation, the Contractor and Subcontractors, and the Designer of Record will be invited to participate in the Partnering process. The Partnership will draw on the strength of each organization in an effort to achieve a project that is without any safety mishaps, conforms to the Contract, and stays within budget and on schedule.

The Contracting Officer will provide information on the Partnering Process and a list of key and optional personnel who should attend the Partnering meeting. Partnering will be accomplished via the methodology indicated in the following table.

PARTNERING METHODOLOGY	
☒	Informal as described in paragraph INFORMAL PARTNERING
☐	Formal as described in paragraph FORMAL PARTNERING

1.11.1 Informal Partnering

The Contracting Officer will organize the Partnering Sessions with key personnel of the project team, including Contractor personnel and Government personnel.

The Initial Partnering session should be a part of the Pre-Construction Meeting. Partnering sessions will be held at a location determined by the Contracting Officer. The Partners will determine the frequency of the follow-on sessions, at no more than 3 to six month intervals.

1.11.2 Formal Partnering

Provide and host the Partnering sessions with key personnel of the Project Team, including Contractor personnel and Government personnel. The contractor shall pay all costs associated with the Partnering effort including the Facilitator, the meeting room, and other incidental items. In exception, each participant bears their own costs for meals, lodging, and transportation associated with the Partnering sessions.

Before a Partnering session, coordinate with the Facilitator all requirements for incidental items (such as audio-visual equipment, easels, flipchart paper, colored markers, note paper, pens/pencils, colored flash cards), and have these items available at the Partnering session. Provide copies of documents for distribution to all attendees.

Provide a Facilitator experienced in conducting Partnering Workshops, and who is acceptable to both the Government and the Contractor. The Facilitator is responsible for leading the team in a timely manner and making sure that issues are identified and resolved.

a. Schedule the Initial Partnering Session for a duration of one day minimum. Locate this session at a place off the construction site, as agreed to by the Contracting Officer and the Contractor. It may take place concurrently with the Pre-Construction Meeting.

b. Schedule follow-on Partnering Session(s) for a maximum of 4 hours. Schedule them at no more than 3 to six month intervals. Follow-on meetings may be held concurrently with other scheduled meetings. Attendees need only be those required to resolve current issues. The same Facilitator from the Initial Partnering session shall be used to achieve best results and for continuity, unless approved in writing by the Contracting Officer.

1.12 ELECTRONIC MAIL (E-MAIL) ADDRESS

Establish and maintain electronic mail (e-mail) capability along with the capability to open various electronic attachments as text files, pdf files, and other similar formats. Within 10 days after contract award, provide the Contracting Officer a single (only one) e-mail address for electronic communications from the Contracting Officer related to this contract including, but not limited to contract documents, invoice information, request for proposals, and other correspondence. The Contracting Officer may also use e-mail to notify the Contractor of base access conditions when emergency conditions warrant, such as terrorist threats. Multiple e-mail addresses are not allowed.

It is the Contractor's responsibility to make timely distribution of all

Contracting Officer initiated e-mail with its own organization including field office(s). Promptly notify the Contracting Officer, in writing, of any changes to this e-mail address.

1.13 ELECTRONIC CORRESPONDENCE

All correspondence and contract documents not generated in RMS-CM shall be submitted in Adobe Portable File format (.pdf). The Contracting Officer will discuss electronic correspondence procedures at Preconstruction and Coordination Meetings. These procedures may include sending files by e-mail, submitting on electronic media such as compact disks, or other methods approved by the Contracting Officer. The Contractor shall be responsible for the cost of the electronic media.

Forms generated in RMS-CM such as QC Reports, Transmittals, and Requests for Information (RFIs) do not have to be re-submitted separately. Examples of correspondence and contract documents that must be submitted in .pdf format include, but are not limited to, Contractor serial letters, notifications to Contracting Officer, requests for equitable adjustment, change requests, claims, and submittals. Submit copies of correspondence to other businesses, entities, or agencies, permit required reports, and other contract documents in .pdf format. Include signatures if applicable for final versions of scanned contracts. E-mail correspondence does not have to be provided in .pdf format. The correspondence and contract documents shall also be submitted in hard copy form, in the quantities and with the requirements listed in these documents, unless the Contractor obtains a waiver from the Contracting Officer.

1.14 HOURS OF WORK

1.14.1 Normal Work Hours

Unless specified elsewhere in the contract, normal work hours are 0800 through 1700, Monday through Friday, excluding US and Host Nation holidays. Work outside of these hours shall not be performed without prior written approval of the Contracting Officer.

1.14.2 Work Outside of Normal Hours

Work outside of normal hours may be granted for the sole benefit of the contractor. Submit requests to perform work outside of normal hours to the Contracting Officer or their authorized representative via serial letter at least 3 work days in advance.

Denial of requests to work outside of normal hours, nor shall any delays occurring during work outside of normal hours be subject to an adjustment in the contract duration or amount.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PHOTOGRAPHIC DOCUMENTATION

a. Pre-construction photos. Prior to the start of any on-site activities, the contractor shall take a minimum of 50 digital photographs of the site. Photos shall be a minimum of 1800 x 1200 pixel size. Photos

shall represent the undisturbed project site prior to any construction activity. Photos shall be accompanied by a site plan identifying locations and dates of the photos taken.

b. A minimum of 25 construction photos shall be furnished to the COR on a weekly basis. The number of photos must be sufficient to accurately and adequately document the ongoing work and site conditions. Photos shall be a minimum of 1800 x 1200 pixel size and shall be submitted in .jpg format. Photos shall be accompanied with a floor and/or site plan identifying locations of the photos taken. Photos shall be submitted through RMS-CM as an attachments to the QC Report for the last work day of the week.

c. For Job Order Contract (JOC) Task Orders, paragraph b. is not applicable. The contractor shall provide photographic documentation on a weekly basis only when specifically identified in the Scope of Work/Statement of Work/Summary of Work (SOW) for the project (task order). If photographic documentation is identified, photos shall be a minimum of 1800 x 1200 pixel size and shall be submitted in .jpg format. The number of photos shall be sufficient to document the site conditions and all photos shall include information with the photo sufficient to determine the location of the photo within the project site. Photos shall be submitted through RMS-CM as attachments to the applicable QC Report.

3.2 MOBILIZATION PLAN

The Contractor shall submit a mobilization plan within two weeks of contract award. This mobilization plan must include, where applicable:

a. Fencing, gates and doors

b. Storage and working areas

c. Material and tool storage structures and locations

d. Sanitary and personnel containers

e. Connected loads in kW

f. Site lighting plan

g. Parking spaces for employees

h. Any other specific installations and systems

3.3 PROJECT SIGN

On commencement of work on this project, the Contractor shall furnish and erect the following temporary signs in locations selected by the Contracting Officer near the project site. The Contractor shall maintain the signs in good condition throughout the project construction period and on completion of the project shall remove the above signs from the premises. The Government will provide templates of the required signs upon request.

a. Safety Sign. This sign shall conform to the requirements of Standard Drawing Safety sign.

b. Project Sign. This sign shall conform to Standard Drawing Project Sign.

3.4 TRAFFIC CONTROL

3.4.1 Haul Routes

The Contractor shall at all times coordinate the work under this contract with the authorities having jurisdiction over the streets and shall be responsible for obtaining approval by the local authorities for their use.

Location and construction of new haul routes, and/or upgrading of existing roads to carry anticipated construction traffic shall be coordinated with the host Government and local authorities and is the sole responsibility of the Contractor. It shall be the Contractor's responsibility to obtain such local authorizations, permits, and licenses necessary. The contractor shall be responsible for any maintenance, repairs, or restoration required by the installation and host nation authorities.

3.4.2 Road Closures

Roads may not be closed without prior written approval from the appropriate authorities. If a road must be blocked the Contractor shall provide a written Traffic Control Plan with all required approvals at least fourteen calendar days in advance.

The Contractor shall provide detours, barricades, warning signs, pavement markings, directional signs and instructions, warning lights, and flag persons as required during the performance of the work under this contract, when roads are required to be closed or traffic restricted due to construction operations. All temporary features shall be removed when their use is no longer required and the roadway restored to the same or better condition as prior to the start of construction.

3.5 CONTRACTOR SITE FACILITIES

3.5.1 Contractor Offices

The Contractor shall provide, at its own expense, all facilities as may be necessary for the purposes of construction work. The location, construction, maintenance, operation and removal of the Contractor’s buildings, shops, storage areas and other facilities at the project site shall be subject to the approval of the Contracting Officer. The Contractor is responsible for obtaining any required additional areas above that designated.

3.5.1.1 Site Facilities - Other Than JOC Projects

The Contractor shall maintain a temporary on-site office which will include space for the Contracting Officer to conduct on-site meetings with the Contractor. Adequate break room and a portable toilet facility shall be furnished by the Contractor for use by contract personnel, and will be the Contractor’s responsibility to maintain in a sanitary condition.

3.5.1.2 Site Facilities - JOC Projects

On-site offices and facilities for JOC projects are only required if specifically called for in the SOW. The JOC Contractor is responsible for determining, prior to submitting a proposal for a specific task order/project, whether on-site facilities will be available.

The Government will not guarantee and the contractor shall not presume adequate space for on-site facilities exists unless specifically called for in the SOW.

3.5.2 Construction Fence/Screening

For projects involving exterior work, a screen type fence is required to be erected around the entire job site perimeter before construction begins. Where the project involves work in multiple areas, or where the exterior work is performed in limited areas, fencing is only required around the areas where exterior work is being performed. Additionally, any contractor site or storage facilities shall be fenced in a similar manner. Submit a plan (drawing)of the proposed location(s) of fencing prior to erection of any fence/screening.

Bilingual signs in English and the Host Nation language shall be placed at the work area entry and along each side of the fencing. Fencing shall be completely secured at top and bottom to prevent access. Fences shall be screened with opaque screening material to prevent visibility inside the fenced area. Fences and screens shall be adequately staked and/or anchored to prevent blowing over during high wind conditions.

The Contractor shall replace or repair in a timely manner, as determined by COR, all fences and screening sections that have damage or develop unsightly rips or holes. It is strictly forbidden to install advertisement signs and/or logos including Contractor’s along the construction site fence. At the end of the work or when exterior work requires it, temporary fencing shall be removed.

3.5.3 Maintenance of Construction Site

The Contractor shall insure that grounds within the contract boundaries are maintained according to the installation standards and that grass is regularly mowed to the satisfaction of the Contracting Officer.

Furthermore, the Contractor shall control dust, mud and/or debris on public roads and minimize dust pollution within newly constructed or renovated facilities

The Contractor shall be responsible for collection and disposal of all trash and waste material, including construction debris and excess soils from the work areas and from the mobilization area in a manner complying with all local laws. The Contractor shall locate temporary trash collection containers in compliance with the contract documents, installation procedures. The Contractor shall include in the contract price the cost, fees and permits required for the removal, transportation and disposal of materials.

3.5.4 Storage Areas

All materials, equipment, and supplies shall be stored in accordance with manufacturer’s regulations, EM385-1-1, and all Host Nation codes. In the event of conflicts, the most stringent shall govern.

Materials which are stored out-of-doors shall be adequately protected. Unless specifically authorized by the government, no materials may be stored in open areas exposed to the elements.

The Contracting Officer may direct the removal of any items which are stored improperly. If the government allows for payment of stored materials, no payment shall be allowed for materials, equipment, or supplies which are improperly stored. Additionally, the government may withhold sufficient funds from pay requests to provide for the repair or replacement of materials, equipment, or supplies which have been improperly stored and installed

3.5.5 Physical Security

The Contractor shall be responsible for physical security of all construction materials, supplies, and equipment of every description (including property which may be Government furnished or owned) provided and/or utilized in the execution of this contract.

Contractor's personnel shall assure that all equipment is de-energized and stored in designated storage areas together with supplies upon completion of work. When buildings are unoccupied, lights, water outlets and blowers shall be turned off and windows closed and locked on a floor-to-floor basis as work progresses, followed by locking of all exterior doors upon completion of work. Keys to buildings shall be deposited with the pertinent installation or building duty officer. The Contractor shall be responsible for any losses or damages arising from their failure to secure buildings during and after working hours.

The Contractor shall be responsible in the event of theft by their personnel of Government property or personal property of Government personnel, civilian or military. All lost or misplaced articles found by their employees shall be turned in to the COR.

3.5.6 Washing of Vehicles

Contractors and their subcontractors and suppliers shall not wash any vehicles, to include the cleaning/emptying of concrete mix trucks on the installation.

3.5.7 Restoration of Construction Site

On completion of the contract, all facilities shall be removed from the mobilization area by the Contractor and shall be disposed of in accordance with the applicable host nation laws and regulations. The construction fence shall be removed and shall remain the property of the Contractor. The site shall be cleared of construction debris and other materials and the area restored to its final grade.

3.6 ENVIRONMENTAL PROTECTION

3.6.1 Environmental Protection Plan

If the project requires any outside work or the construction of temporary site facilities, the Contractor shall be responsible for providing an Environmental Protection Plan (EPP) for the prevention of environmental pollution during and as the result of construction operations under this contract. This plan shall be approved prior to mobilization to the site and is required in addition to any plans required by the installation or host nation agencies at any level.

The EPP shall include, at a minimum, the following:

a. Identification of installation, host nation and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations and permits.

b. Procedures to be implemented to provide the required environmental protection, to comply with the applicable laws and regulations, and to correct pollution due to accident, natural causes or failure to follow the procedures of the EPP.

c. Methods for protection of features to be preserved within authorized work areas like trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archeological, and cultural resources

d. Procedures to be implemented to control and prevent fugitive dust during and as the result of construction operations under this contract.

3.6.2 Protection of Land Resources

The land resources outside the limits of permanent work shall be preserved in its present condition or restored to its original condition after completion of construction. The Contractor shall confine construction activities to areas defined by the plans or specifications. Any landscape feature damaged by the Contractor's operations shall be restored to its original condition at the Contractor's expense. The Contracting Officer will decide what method of restoration shall be used.

3.6.3 Protection of Water Resources

The Contractor shall not pollute streams or drainage courses with fuels, oils, bitumen, calcium chloride acids, construction wastes, or other harmful materials. It is the responsibility of the Contractor to investigate and comply with all applicable local laws and directives concerning pollution. All work shall be performed so that objectionable conditions will not be created.

Ground which has been contaminated by Contractor activities shall be excavated, disposed of and replaced with suitable fill material, compacted and finished with top soil without any adjustment in the contract price.

3.6.4 Dust Control

Control techniques for fugitive dust may include, but are not limited to, watering, chemical treatment, light bituminous treatment, or reduction of surface wind speed with wind breaks or source enclosures, the elimination of mud and dirt carry-out onto paved roads at construction sites, or clean-up of spillage on paved or unpaved travel surfaces and clean-up of materials spillage at transfer points. The methods utilized shall be appropriate for the size and scope of the fugitive dust source. Methods and controls shall not have adverse effects on plant and animal life, or contaminate the treated material.

Methods shall be repeated at such intervals as to keep all parts of the disturbed area treated at all times, and the Contractor shall have sufficient competent equipment on the job to accomplish control techniques. Products shall provide a method to reduce dust-related environmental concerns and aid in complying with applicable regulations. Products shall not in any form produce any adverse environmental effects through their use

and shall provide an effective, clean, safe control of dust protection against soil erosion.

3.7 EXCLUSIONS

3.7.1 Prohibited Materials

The following is prohibited in this project:

a. Use of aluminum for electrical conductors

b. Embedding aluminum conduit in concrete.

c. Use of fluorescent light ballasts and other products containing PCB's.

d. Use of urea-formaldehyde foam insulation products.

e. Use of any paint/coatings having a lead content of over 0.06 percent by weight of non-volatile content.

f. Use of any ozone depleting chemicals

g. Use of zinc-chromate

h. Use of materials containing asbestos

The Contractor shall submit and provide only materials, equipment, or systems for approval that have been in service/manufacture for at least two (2) years.

3.7.2 Hazardous Materials

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint, and hexavalent chromium, are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

3.7.3 Explosive Materials

Use of explosive materials in the context of the work defined in this contract is strictly prohibited.

3.7.4 Burning

Burning will not be permitted.

3.8 PROTECTIVE MEASURES

The Contractor shall be responsible for protective measures during construction and shall provide barricades and protective signs in both the

English and host nation languages. For inside work, the Contractor shall protect floors, furniture, and furnishings, appliances, other objects and structural parts against soiling or damage, by using drop cloths or other suitable coverings.

Where indicated, the Contractor shall be responsible for removal and/or storage of furnishings (including furniture, carpets and drapes) and equipment (such as machines which are in addition to equipment which forms part of integral building systems requiring work under the contract) as required for preparation of work areas. The Contractor shall replace furnishings and equipment so removed at their original locations upon completion of the work. If not specifically stated elsewhere in this contract to be the Contractor's responsibility, removal, storage, and/or reinstallation of furnishings and equipment shall be the responsibility of Government forces.

Repair of damages to personal property, buildings, vehicles, ground or other Government property caused directly or indirectly by Contractor personnel (to include subcontractors and suppliers) shall be the Contractor's responsibility and shall be repaired or replaced at the Contractor's expense.

3.9 UTILITY OUTAGES

Apply for utility outages at least 14 days in advance from the appropriate installation and utilities representatives. The contractor shall be responsible for coordinating all outages directly with the appropriate authorities and providing all required documentation unless directed otherwise by the Contracting Officer. A pre-outage coordination meeting may be required prior to approval or commencement of any utility outage.

If, as a condition of approval, outages are required to be limited to weekends, holidays, or non-standard work hours, the Contractor shall perform the work during the time designated.

3.10 TEMPORARY UTILITIES

The Contractor shall provide, at its own expense, such temporary heating or cooling as may be necessary for their office and personnel, or for the purposes of construction work. Any temporary type of heating or cooling provided shall conform to all applicable safety requirements.

Prior to submitting a proposal, the Contractor shall make all necessary evaluations to determine if utilities (water, sewer, electricity, and communication) required for performance of the work are available, if the quantities available are adequate, and whether they will be required to pay for the utilities. Connection to utilities and bringing them to the work location shall be done by the contractor at their own expense. The Government shall not reimburse the contractor separately for any temporary utilities; the price of the work shall not be dependent on the arrangements required for supply of utilities.

Use of back-up power is at the discretion of the contractor, however no time extension or change in the contract price will be allowed for delays resulting from a lack of power or for costs associated with providing temporary power.

3.11 EXCAVATION

3.11.1 Permission to Excavate

The Contractor shall obtain all necessary permits in addition to written permission to excavate from the appropriate installation or local authority having jurisdiction prior to commencing with any excavation work.

3.11.2 Utility Locations

Prior to any excavation, all underground utilities in the work area must be positively identified by the contractor utilizing a) a private utility locating service in addition to any installation locating service, and/or b) a metal and/or cable-detecting device along the route of the excavation. All underground utilities discovered will be flagged a distance of one-half (1/2) meter on each side of the location, and any markings made during the utility investigation must be maintained throughout the contract. The use of historical drawings does not alleviate the Contractor from meeting this requirement.

3.11.3 Utility Location Verification

Physically verify underground utility locations, including utility depth, by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within 1 meter of the underground system. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified.

3.11.4 Weather Protection

Care shall be taken to maintain open excavations only during installation and testing of piping, foundations, or other features. The Contractor shall be responsible for providing temporary drainage and/or pumping equipment necessary to keep excavations in a dewatered condition as necessary. Provisions shall be made to protect excavations from collapse and erosion, and to ensure that runoff or discharge of water from excavations is properly channeled and disposed of to prevent sedimentation or pollution of streams, drainage systems, or nearby property.

3.12 DISPOSITION OF MATERIALS

3.12.1 Turn-In Salvage Materials

The Contractor shall be responsible for salvage. Salvageable materials will be so designated by the U.S. or local authorities. All material to be removed from the installation is subject to approval of the local installation commander.

All dismantled materials indicated for turn-in elsewhere in the contract documents or as directed by the Contracting Officer shall be enumerated in a roster prepared by the Contractor and such materials shall be turned in at a location selected by the Contracting Officer. The Contractor shall obtain a hand receipt for the materials turned in. Turn-in times shall be as directed by the Contracting Officer.

3.12.2 Title to Materials

Unless indicated elsewhere in the contract documents, all materials and equipment removed and not reused or salvaged, shall become the property of

the Contractor and shall be removed from Government property. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Showing for sale or selling materials and equipment on site is prohibited.

3.13 PROPRIETARY NAMES

Unless specifically identified in the contract as a Sole Source Item, manufacturer's proprietary names indicated for colors, textures and patterns of materials are for the purpose of color, texture and pattern selection only. Other materials are acceptable provided they closely approximate colors, textures and patterns indicated. Any substitutions must conform to all other requirements and must be approved by the Contracting Officer

-- End of Section --

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PROJECT SCHEDULE (NAU)
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PART 1 GENERAL

1.1 REFERENCES

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

AACE INTERNATIONAL (AACE)

AACE 29R-03	(2011) Forensic Schedule Analysis
AACE 52R-06	(2006) Time Impact Analysis - As Applied in Construction

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11	(1995) Administration -- Progress, Schedules, and Network Analysis Systems

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Project Scheduler Qualifications; G
Preliminary Project Schedule; G
Initial Project Schedule; G

SD-07 Certificates
Schedule Updates; G
Revised Schedule; G

1.3 PROJECT SCHEDULER QUALIFICATIONS

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating and production of reports. The authorized representative must have a minimum of 2-years experience scheduling construction projects similar in size and nature to this project with scheduling software that meets the requirements of this specification. Representative must have a comprehensive knowledge of Critical Path Method (CPM)scheduling principles and application.

1.4 CORRESPONDENCE AND TEST REPORTS

All correspondence (e.g., letters, Requests for Information (RFI's),

e-mails, meeting minute items, QC Daily Reports, material delivery tickets, photographs) and test reports (e.g., concrete, soil compaction, weld, pressure)must identify or otherwise reference the applicable existing activity(ies) in the schedule.

1.5 DEFINITIONS AND TERMINOLOGY

1.5.1 Change

A change to the project schedule refers to any of the following:

a. Alterations to activity logic (predecessor or successor activities, lag or lead durations)

b. Combining or dividing activities

c. Creation or deletion of activities, including via modifications. Activity ID and description changes are considered new activities.

d. Adjustments in scheduled duration or amount

e. Any other modification to the schedule which alter the planned execution of the works.

No changes shall be made to the approved project schedule without either the express written direction of the Contracting Officer, or their prior approval. All changes must be provided via a formal submittal and shown on the submittal register. Any changes not specifically authorized by the Contracting Officer may result in disapproval of the entire schedule and the rejection of any requests for partial payment.

1.5.2 Revision

A revision to the project schedule is equivalent to a change in the project schedule. See Change.

1.5.3 Update

An update to the project schedule refers to information associated with an activity that reflects actual progress, and is limited to:

a. The entry of actual start and finish dates for activities

b. Updated scheduled start and finish dates of an activity without any changes in logic, resource assignment, or original duration resulting from entering actual start and finish dates of dependent activities

c. Recording of progress on an activity to represent work completed, including expected/planned finish date based on actual progress

d. Completion of a milestone or other event in the schedule

PART 2 PRODUCTS

2.1 SOFTWARE

The scheduling software utilized to produce and update the schedules required herein must be capable of meeting all requirements of this specification.

2.1.1 Government Default Software

The Government intends to use Primavera P6.

2.1.2 Contractor Software

Scheduling software used by the contractor must be commercially available from the software vendor for purchase with vendor software support agreements available.

2.1.2.1 Primavera

If Primavera P6 is selected for use, provide the "xer" export file in a version of P6 importable by the Government system.

2.1.2.2 Other Than Primavera

If the contractor chooses software other than Primavera P6, that is compliant with this specification, provide for the Government's use two licenses, two computers, and training for two Government employees in the use of the software. These computers will be stand-alone and not connected to Government network. Computers and licenses will be returned at project completion.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to FAR Clause 52.236-15, SCHEDULE FOR CONSTRUCTION CONTRACTS. Show in the schedule the proposed sequence to perform the work and dates contemplated for starting and completing all schedule activities. The scheduling of the entire project, including design activities (when the contractor is responsible for design) and all construction is required. Scheduling is the responsibility of the Contractor.

Contractor management personnel must actively participate in its development. The contractor is responsible for coordinating the schedule with their subcontractors, suppliers, and where design is being performed by the contractor, their designers to ensure the Project Schedule remains accurate. Provide a schedule that is a forward planning as well as a project monitoring tool. Use the Critical Path Method (CPM) of network calculation to generate all Project Schedules. Prepare each Project Schedule using the Precedence Diagram Method (PDM).

3.2 BASIS FOR PAYMENT AND COST LOADING

The schedule is the basis for determining contract earnings during each update period and therefore the amount of each progress payment. The aggregate value of all activities coded to a contract CLIN must equal the value of the CLIN.

3.2.1 Activity Cost Loading

Activity cost loading must be reasonable and without front-end loading. Provide additional documentation to demonstrate reasonableness if requested by the Contracting Officer.

Negative values for activity costs are prohibited. If existing requirements are reduced or removed via modification, reduce the value of existing activities.

3.2.2 Withholdings / Payment Rejection

Failure to meet the requirements of this specification may result in the disapproval of the preliminary, initial or periodic schedule updates and subsequent rejection of payment requests until compliance is met.

In the event that the Contracting Officer directs schedule revisions and those revisions have not been included in subsequent Project Schedule revisions or updates, the Contracting Officer may withhold 10 percent of pay request amount from each payment period or reject the pay request in its entirety until such revisions to the project schedule have been made.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

3.3.1 Level of Detail Required

Develop the Project Schedule to the appropriate level of detail to address major milestones and to allow for satisfactory project planning and execution. Failure to develop the Project Schedule to an appropriate level of detail will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement construction activities may have Original Durations (OD) greater than 20 work days or 30 calendar days. Design, Review, and Approval activities may have longer durations to reflect the actual requirements of the activity.

3.3.3 Design Activities (Design-Build Projects)

Include design activities with the necessary conferences and follow-up actions and design package submission dates. Include the design schedule in the project schedule, showing the sequence of events involved in carrying out the project design tasks within the specific contract period. Provide at a detailed level of scheduling sufficient to identify all major design tasks, including those that control the flow of work. Also include review and correction periods associated with each item.

3.3.4 Permitting and Approval Activities

Include activities for submission, review, and approval of any required permits from Host Nation authorities at any level (National, State, Local, etc.) which could impact the schedule. Ensure appropriate logic ties to documents required to be generated and include adequate review periods for Host Nation authorities, including any required conferences.

This requirement does not include recurring approval activities which extend throughout the performance period, such as vetting of workers or host nation installation access requirements.

3.3.5 Long Lead Activities

Include activities associated with the critical submittals and their approvals, procurement, fabrication, and delivery of long lead materials, equipment, fabricated assemblies, and supplies. Long lead activities are those with an anticipated duration of at least 25 calendar days.

3.3.6 Mandatory Tasks

Include the following activities/tasks in the initial project schedule and all updates unless the activity/task is not required elsewhere in this contract.

a. Submission, review and acceptance of SD-01 Preconstruction Submittals (individual activity for each).

b. Submission, review and acceptance of design packages or features requiring design completion (extensions of design). Preparation and review shall be separate activities.

c. Submission of mechanical/electrical/information systems layout drawings.

d. Long procurement activities

e. Submission and approval of O & M manuals.

f. Submission and approval of as-built drawings.

g. Submission and approval of DD1354 data and installed equipment lists.

h. Submission and approval of testing and air balance (TAB).

i. Submission of TAB specialist design review report.

j. Submission and approval of fire protection specialist.

k. Submission and approval of Building Commissioning Plan, test data, and reports: Develop the schedule logic associated with testing and commissioning of mechanical systems to a level of detail consistent with the contract commissioning requirements. All tasks associated with all building testing and commissioning will be completed prior to submission of building commissioning report and subsequent contract completion.

l. Air and water balancing.

m. Building commissioning - Functional Performance Testing.

n. Controls testing plan submission.

o. Controls testing.

p. Performance Verification testing.

q. Other systems testing, if required.

r. Contractor's pre-final inspection.

s. Correction of punch list from Contractor's pre-final inspection.

t. Government's pre-final inspection.

u. Correction of punch list from Government's pre-final inspection.

v. Final inspection.

3.3.7 Government and Host Nation Activities

Show Government and Host Nation activities that could impact progress. These activities include, but are not limited to: approvals, acceptance, design reviews, permits, , inspections, utility connection or tie-in, move-in or move-out of facilities, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.8 Contract Milestones and Constraints

Milestone activities are to be used for significant project events including, but not limited to, project phasing, project start and end activities, or interim completion dates. The use of artificial float constraints such as "zero free float" or "zero total float" are prohibited.

Mandatory constraints that ignore or effect network logic are prohibited. No constrained dates are allowed in the schedule other than those specified herein. Submit additional constraints to the Contracting Officer for approval on a case by case basis.

3.3.8.1 Project Start Date Milestone and Constraint

The first activity in the project schedule must be a start milestone titled "NTP Acknowledged," which must have a "Start On" constraint date equal to the date that the NTP is acknowledged.

3.3.8.2 Construction Completion Milestone and Constraint

The last activity required to be completed prior to acceptance of the project by the Government must be a finish milestone titled "Required Completion."

Constrain the project schedule to the Contract Completion Date in such a way that if the schedule calculates an early finish, then the float calculation for "Required Completion" milestone reflects positive float on the longest path. If the project schedule calculates a late finish, then the "Required Completion" milestone float calculation reflects negative float on the longest path.

3.3.8.3 End Project Finish Milestone and Constraint

The last activity in the schedule must be a finish milestone titled "End Project."

Activities which are not required to be completed prior to acceptance should be linked to this milestone, rather than the "Required Completion" milestone. Typical activities may include completion of as-built drawings, final O&M manuals, etc. The Government retains right to direct activities to be linked to the "Required Completion" milestone.

The "End Project" milestone represents the completion of all physical work at the project site and acceptance or approval of all contractor required

deliverables. It normally coincides with the contractors submission of final payment.

3.3.8.4 Interim Completion Dates and Constraints

Constrain contractually specified interim completion dates to show negative float when the calculated late finish date of the last activity in that phase is later than the specified interim completion date.

3.3.8.4.1 Start Phase

Use a start milestone as the first activity for a project phase. Call the start milestone "Start Phase X" where "X" refers to the phase of work.

3.3.8.4.2 End Phase

Use a finish milestone as the last activity for a project phase. Call the finish milestone "End Phase X" where "X" refers to the phase of work.

3.3.9 Calendars

Schedule activities on a Calendar to which the activity logically belongs. Develop calendars to accommodate any contract defined work period such as a 7-day calendar for Government Acceptance activities, concrete cure times, etc. Develop the default Calendar to match the physical work plan with non-work periods identified including weekends and holidays. Develop seasonal Calendar(s) and assign to seasonally affected activities as applicable.

If an activity is weather sensitive it shall be assigned to a calendar showing non-work days on a monthly basis, with the non-work days selected at random across the weeks of the calendar, using the anticipated days provided in Section 00 74 01 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER. Assign non-work days over the actual work week, adjusting the anticipated delay for the actual number of days in the work-week if it is more or less than 5 days.

3.3.10 Open Ended Logic

Only two open ended activities are allowed: the first activity "NTP Acknowledged" may have no predecessor logic, and the last activity -"End Project" may have no successor logic.

Predecessor open ended logic may be allowed in a time impact analyses upon the Contracting Officer's approval.

3.3.11 Default Progress Data Disallowed

Actual Start and Finish dates must not automatically update with default mechanisms included in the scheduling software. Updating of the percent complete and the remaining duration of any activity must be independent functions. Disable program features that calculate one of these parameters from the other. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process must match those dates provided in the Contractor Quality Control Reports. Failure to document the AS and AF dates in the Daily Quality Control report will result in disapproval of the Contractor's schedule.

3.3.12 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Address out of sequence progress or logic changes in the Narrative Report and in the periodic schedule update meetings.

3.3.13 Added and Deleted Activities

Do not delete activities from the project schedule or add new activities to the schedule without approval from the Contracting Officer. Activity ID and description changes are considered new activities and cannot be changed without Contracting Officer approval.

3.3.14 Original Durations

Activity Original Durations (OD) must be reasonable to perform the work item. OD changes are prohibited unless justification is provided and approved by the Contracting Officer.

3.3.15 Leads, Lags, and Start to Finish Relationships

Lags must be reasonable as determined by the Government and not used in place of realistic original durations, must not be in place to artificially absorb float, or to replace proper schedule logic.

a. Leads (negative lags) are prohibited.

b. Start to Finish (SF) relationships are prohibited.

3.3.16 Retained Logic

Schedule calculations must retain the logic between predecessors and successors ("retained logic" mode) even when the successor activity(s) starts and the predecessor activity(s) has not finished (out-of-sequence progress). Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") are not be allowed.

3.3.17 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete to allow for proper schedule management.

3.3.18 Remaining Duration

Update the remaining duration for each activity based on the number of estimated work days it will take to complete the activity. Remaining duration may not mathematically correlate with percentage found under paragraph entitled Percent Complete.

3.3.19 Cost Loading of Closeout Activities

Cost load the "Correction of punch list from Government pre-final inspection" activity(ies) not less than 1 percent of the present contract value. Activity(ies) may be declared 100 percent complete upon the Government's verification of completion and correction of all punch list work identified during Government pre-final inspection(s).

3.3.19.1 As-Built Drawings

If there is no separate contract line item (CLIN) for as-built drawings, cost load the "Submission and approval of as-built drawings" activity not less than $35,000 or 1 percent of the present contract value, which ever is greater, up to $200,000. Activity will be declared 100 percent complete upon the Government's approval.

3.3.19.2 O & M Manuals

Cost load the "Submission and approval of O & M manuals" activity not less than $20,000. Activity will be declared 100 percent complete upon the Government's approval of all O & M manuals.

3.3.20 Early Completion Schedule and the Right to Finish Early

An Early Completion Schedule is an Initial Project Schedule (IPS) that indicates all scope of the required contract work will be completed before the contractually required completion date.

a. No IPS indicating an Early Completion will be accepted without being fully resource-loaded (including crew sizes and manhours) and the Government agreeing that the schedule is reasonable and achievable.

b. Neither the Government nor any Host Nation agency is under obligation to accelerate work items it is responsible for to ensure that the early completion is met nor is the Government responsible to modify incremental funding (if applicable) for the project to meet the contractor's accelerated work.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data CD/DVD, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS. If the Contractor fails or refuses to furnish the information and schedule updates as set forth herein, then the Contractor will be deemed not to have provided an estimate upon which a progress payment can be made.

Review comments made by the Government on the schedule(s) do not relieve the Contractor from compliance with requirements of the Contract Documents.

3.4.1 Preliminary Project Schedule Submission

Within 15 calendar days after the NTP is acknowledged submit the Preliminary Project Schedule defining the planned operations detailed for the first 90 calendar days for approval. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. The

Preliminary Project Schedule may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required plan and program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as design activities, planned submissions of all early design packages, permitting activities, design review conference activities, and other non-construction activities intended to occur within the first 90 calendar days. Government acceptance of the associated design package(s) and all other specified Program and Plan approvals must occur prior to any planned construction activities. Activity code any activities that are summary in nature after the first 90 calendar days with Bid Item (CLIN) code (BIDI), Responsibility Code (RESP) and Feature of Work code (FOW).

3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 42 calendar days after notice to proceed is issued. The schedule must demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period.

Include in the design-build schedule detailed design and permitting activities, including but not limited to identification of individual design packages, design submission, reviews and conferences; permit submissions and any required Government actions; and long lead item acquisition prior to design completion. Include the entire construction effort with as much detail as is known at the time but, as a minimum, include all construction start and completion milestones, and detailed construction activities through the dry-in milestone,including all activity coding and cost loading. Include the remaining construction, including cost loading, but it may be scheduled summary in nature. Constrain construction activities by Government acceptance of associated designs.

As the design proceeds and design packages are developed, fully detail the remaining construction activities. To prevent delays in processing payments, do not add construction activities to schedule updates but submit as a Revised Schedule as described elsewhere in this specification.

No payment will be made for work items not fully detailed in the Project Schedule.

3.4.3 Schedule Updates

Update the Project Schedule on a regular basis, monthly at a minimum. Provide a draft Periodic Schedule Update for review at the schedule update meetings as prescribed in the paragraph PERIODIC SCHEDULE UPDATE MEETINGS. These updates will enable the Government to assess Contractor's progress. Schedule Updates shall be submitted as a resubmittal of the approved project schedule.

a. Update information including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete is subject to the approval of the Government at the meeting.

b. AS and AF dates must match the date(s) reported on the Contractor's Quality Control Report for an activity start or finish.

3.4.4 Changed or Revised Schedule

When it becomes necessary to change or revise (not update) the approved schedule, prepare a detailed narrative identifying all changes to the project schedule by activity ID and activity name, including what specifically was changed and why the change was needed. Include at a minimum new and deleted activities, logic changes, duration changes, calendar changes, lag changes, resource changes, and actual start and finish date changes.

Submit the revised schedule, narrative, and all documents schedule reports identified in paragraph SCHEDULE REPORTS as a new transmittal, not a resubmittal of a previously approved submittal.

3.4.4.1 Detailing of Construction Activities During Design

Update the schedule to include detailed construction activities as the design progresses, but not later than the submission of the final un-reviewed design submission for each separate design package. The Contracting Officer may require submission of detailed schedule activities for any distinct construction that is started prior to submission of a final design submission if such activity is authorized.

All construction activities dependent on design must be detailed in a Revised Schedule submitted no later than the date of the 100% (Final) design for the associated work, otherwise the schedule shall be deemed unacceptable for the purposes of evaluating progress and making payment.

3.4.4.2 Payment

Payment will not normally be made on any revised schedule prior to approval by the Government. Payment will continue to be made based on updates to the previously approved schedule.

Notwithstanding the above, the Government may allow payment to be made on an unapproved revised schedule which shows actual progress to date. Such allowance shall be made in writing by the Contracting Officer. This shall not be construed as approval of the schedule nor the acceptability of the contractors plan for completing the work.

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, each Revised Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Electronic Data

Provide via electronic means the current project schedule in the format of the scheduling software (e.g. .xer). Also include pdf copies of the Narrative Report and all required Schedule Reports. Each schedule must have a unique file name and use project specific settings. Files shall be submitted through RMS-CM as attachments to a submittal. E-mail will also be used for attachments up to 10 MB in size.

3.5.2 Narrative Report

Provide a Narrative Report with each schedule submission. The Narrative Report is expected to communicate to the Government the thorough analysis

of the schedule output and the plans to compensate for any problems, either current or potential, which are revealed through that analysis. Include the following information as minimum in the Narrative Report:

a. Identify and discuss the work scheduled to start in the next update period.

b. A description of activities along the two most critical paths where the total float is less than or equal to 20 work days.

c. A description of current and anticipated problem areas or delaying factors and their impact and an explanation of corrective actions taken or required to be taken.

d. Identify and explain why activities based on their calculated late dates should have either started or finished during the update period but did not.

e. With the exception of Periodic Schedule Updates (where none of this information is changed) identify and discuss all schedule changes by activity ID and activity name including what specifically was changed and why the change was needed. Include at a minimum new and deleted activities, logic changes, duration changes, calendar changes, lag changes, and resource changes.

f. Identify and discuss out-of-sequence work.

3.5.3 Network Diagram

A Network Diagram shall be included with every schedule submission, update, and revision. Depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Network Diagram shall show the name and description of all activities with their duration and total float.

The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.3.1 Preliminary, Initial, Revised Schedules

Two Network Diagrams shall be submitted:

a. A GANTT chart including Start and Finish Dates, total float, logic, and duration.

b. A standard Activity on Node CPM chart showing early start, early finish, late start, and late finish, along with all logic.

3.5.3.2 Periodic Schedule Updates

The Network Diagram for schedule updates shall be of a GANTT Chart style and include: Baseline Start and Finish Dates, current planned Start and Finish Dates, total float, and duration. The chart shall show the baseline and actual/planned bars.

3.5.3.3 Continuous Flow

Show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, and estimated

earned value on the diagram.

3.5.3.4 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.3.5 Critical Path

Show all activities on the critical path. The critical path is defined as the longest path.

3.5.3.6 Banding

Organize activities using the Work Breakdown Structure (WBS) or as otherwise directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by major elements of work, category of work, work area and/or responsibility.

3.5.3.7 Cash Flow / Schedule Variance Control (SVC) Diagram

With each schedule submission, provide a SVC diagram showing 1) Cash Flow S-Curves indicating planned project cost based on projected early and late activity finish dates, and 2) Earned Value to-date.

3.6 PERIODIC SCHEDULE UPDATE

3.6.1 Periodic Schedule Update Meetings

Conduct periodic schedule update meetings for the purpose of reviewing the proposed Schedule Update, Narrative Report, Schedule Reports, and progress payment. Conduct meetings at least monthly within five days of the proposed schedule data date. Provide a computer with the scheduling software loaded and a projector which allows all meeting participants to view the proposed schedule during the meeting. The Contractor's authorized scheduler must organize, group, sort, filter, perform schedule revisions as needed and review functions as requested by the Contractor and/or Government. The meeting is a working interactive exchange which allows the Government and Contractor the opportunity to review the updated schedule on a real time and interactive basis. The meeting will last no longer than 8 hours. Provide a draft of the proposed narrative report and schedule data file to the Government a minimum of two workdays in advance of the meeting. The Contractor's Project Manager and scheduler must attend the meeting with the authorized representative of the Contracting Officer. Superintendents, foremen and major subcontractors must attend the meeting as required to discuss the project schedule and work. Following the periodic schedule update meeting, make corrections to the draft submission. Include only those changes approved by the Government in the submission and invoice for payment.

3.6.2 Update Submission Following Progress Meeting

Submit the complete Schedule Updates of the Project Schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 work days after the periodic schedule update meeting.

3.7 WEEKLY PROGRESS MEETINGS

Conduct a weekly meeting with the Government (or as otherwise mutually agreed to) between the meetings described in paragraph entitled PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. Use the current approved schedule update for the purposes of this meeting and for the production and review of reports. At the weekly progress meeting, address the status of RFI's, RFP's and Submittals.

3.8 REQUESTS FOR TIME EXTENSIONS

Provide a justification of delay to the Contracting Officer in accordance with the contract provisions and clauses for approval within 10 days of a delay occurring. Also prepare a time impact analysis for each Government request for proposal (RFP) to justify time extensions.

3.8.1 Justification of Delay

Provide a description of the event(s) that caused the delay and/or impact to the work. As part of the description, identify all schedule activities impacted. Show that the event that caused the delay/impact was the responsibility of the Government. Provide a time impact analysis that demonstrates the effects of the delay or impact on the project completion date or interim completion date(s). Evaluate multiple impacts chronologically; each with its own justification of delay. With multiple impacts consider any concurrency of delay. A time extension and the schedule fragnet becomes part of the project schedule and all future schedule updates upon approval by the Contracting Officer.

3.8.2 Time Impact Analysis (Prospective Analysis)

Prepare a time impact analysis for approval by the Contracting Officer based on industry standard AACE 52R-06. Utilize a copy of the last approved schedule prior to the first day of the impact or delay for the time impact analysis. If Contracting Officer determines the time frame between the last approved schedule and the first day of impact is too great, prepare an interim updated schedule to perform the time impact analysis. Unless approved by the Contracting Officer, no other changes may be incorporated into the schedule being used to justify the time impact.

3.8.3 Forensic Schedule Analysis (Retrospective Analysis)

Prepare an analysis for approval by the Contracting Officer based on industry standard AACE 29R-03.

3.8.4 Fragmentary Network (Fragnet)

Prepare a proposed fragnet for time impact analysis consisting of a sequence of new activities that are proposed to be added to the project schedule to demonstrate the influence of the delay or impact to the project's contractual dates. Clearly show how the proposed fragnet is to be tied into the project schedule including all predecessors and successors to the fragnet activities. The proposed fragnet must be approved by the Contracting Officer prior to incorporation into the project schedule.

3.8.5 Time Extension

The Contracting Officer must approve the Justification of Delay including the time impact analysis via a modification to the contract before a time extension will be granted. No time extension will be granted unless the delay consumes all available Project Float and extends the projected finish date ("Construction Completion" milestone) beyond the Contract Completion Date. The time extension will be in calendar days.

Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

3.8.6 Impact to Early Completion Schedule

No extended overhead will be paid for delay prior to the original Contract Completion Date for an Early Completion IPS unless the Contractor actually performed work in accordance with that Early Completion Schedule. The Contractor must show that an early completion was achievable had it not been for the impact.

3.9 FAILURE TO ACHIEVE PROGRESS

Should the progress fall behind the approved project schedule for reasons other than those that are excusable within the terms of the contract, the Contracting Officer may require provision of a written recovery plan for approval. The plan must detail how progress will be made-up to include which activities will be accelerated by adding additional crews, longer work hours, extra work days, etc.

3.9.1 Artificially Improving Progress

Artificially improving progress by means such as, but not limited to, revising the schedule logic, modifying or adding constraints, shortening activity durations, or changing calendars in the project schedule is prohibited. Indicate assumptions made and the basis for any logic, constraint, duration and calendar changes used in the creation of the recovery plan. Any additional resources, manpower, or daily and weekly work hour changes proposed in the recovery plan must be evident at the work site and documented in the daily report along with the Schedule Narrative Report.

3.9.2 Failure to Perform

Failure to perform work and maintain progress in accordance with the supplemental recovery plan may result in an interim and final unsatisfactory performance rating and/or may result in corrective action directed by the Contracting Officer pursuant to FAR 52.236-15 Schedules for Construction Contracts, FAR 52.249-10 Default (Fixed-Price Construction), and other contract provisions.

3.9.3 Recovery Schedule

Should the Contracting Officer find it necessary, submit a recovery schedule pursuant to FAR 52.236-15 Schedules for Construction Contracts.

3.10 OWNERSHIP OF FLOAT

Except for the provision given in the paragraph IMPACT TO EARLY COMPLETION SCHEDULE, float available in the schedule, at any time, may not be considered for the exclusive use of either the Government or the Contractor including activity and/or project float. Activity float is the number of work days that an activity can be delayed without causing a delay to the "End Project" finish milestone. Project float (if applicable) is the number of work days between the projected early finish and the contract completion date milestone.

3.11 TRANSFER OF SCHEDULE DATA INTO RMS-CM

Import the schedule data into RMS-CM. This data is considered to be additional supporting data in a form and detail required by the Contracting Officer pursuant to FAR 52.232-5 - Payments under Fixed-Price Construction Contracts. The receipt of a proper payment request pursuant to FAR 52.232-27 - Prompt Payment for Construction Contracts is contingent upon the Government receiving both acceptable and approvable hard copies and matching RMS data for the application for progress payment.

Data may be imported into RMS-CM only if the scheduling software allows activity coding in the Standard Data Exchange Format (SDEF) as described below. If the scheduling software does not allow importing into RMS-CM using SDEF, the information must be manually loaded in RMS-CM by the contractor.

3.11.1 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11. This exact structure is mandatory. Develop and assign all Activity Codes to activities as detailed herein.

The SDEF format is as follows:

Field	Activity Code	Length	Description
1	WRKP	3	Workers per day
2	RESP	4	Responsible party
3	AREA	4	Area of work
4	MODF	6	Modification Number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of work
7	CATW	1	Category of work
8	FOW	20	Feature of work*

Field	Activity Code	Length	Description
*Some systems require that FEATURE OF WORK values be placed in several activity code fields. The notation shown is for Primavera P6. Refer to the specific software guidelines with respect to the FEATURE OF WORK field requirements.			

3.11.1.1 Workers Per Day (WRKP)

Assign Workers per Day for all field construction or direct work activities, if directed by the Contracting Officer. Workers per day is based on the average number of workers expected each day to perform a task for the duration of that activity.

3.11.1.2 Responsible Party Coding (RESP)

Assign responsibility code for all activities to the Prime Contractor, Subcontractor(s) or Government agency(ies) responsible for performing the activity.

a. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, Government design reviews, Government Furnished Property/Equipment (GFP) and Notice to Proceed (NTP) for phasing requirements.

b. Activities which are the responsibility of any Host Nation or foreign (non-US) Government agency at any level, including, but not limited to: reviews, permit approvals, and clearances must have a Host Nation Responsibility Code assigned.

c. Activities cannot have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); GOVT (for USACE); and HONA (for Host Nation).

3.11.1.3 Area of Work Coding (AREA)

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities cannot have more than one Work Area Code.

Not all activities are required to be Work Area coded. A lack of Work Area coding indicates the activity is not resource or space constrained.

3.11.1.4 Modification Number (MODF)

Assign a Modification Number Code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by Contracting Officer. Key all Code values to the Government's modification numbering system. An activity can have only one Modification

Number Code.

3.11.1.5 Bid Item Coding (BIDI)

Assign a Bid Item Code to all activities using the Contract Line Item Schedule (CLIN) to which the activity belongs, even when an activity is not cost loaded. An activity can have only one BIDI Code.

3.11.1.6 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities. Examples of phase of work are design phase, procurement phase, and construction phase. Each activity can have only one Phase of Work code.

a. Code proposed fast track design and construction phases proposed to allow filtering and organizing the schedule by fast track design and construction packages.

b. If the contract specifies phasing with separately defined performance periods, identify a Phase Code to allow filtering and organizing the schedule accordingly.

3.11.1.7 Category of Work Coding (CATW)

Assign a Category of Work Code to all activities. Category of Work Codes include, but are not limited to design, design submittal, design reviews, review conferences, permits, construction submittals, procurement, fabrication, weather sensitive installation, non-weather sensitive installation, start-up, and testing activities. Each activity can have no more than one Category of Work Code.

3.11.1.8 Feature of Work Coding (FOW)

Assign a Feature of Work Code to appropriate activities based on the Definable Feature of Work to which the activity belongs based on the approved QC plan.

Definable Feature of Work is defined in Section 01 45 00 QUALITY CONTROL. An activity can have only one Feature of Work Code.

3.11.2 Manual Entry of Schedule Information

If the scheduling software is not able to create a SDEF file, the contractor shall manually enter the following schedule information in RMS-CM for each activity:

a. ID (Number)
b. Description
c. Duration
d. Amount
e. CLIN
f. All other information identified in Paragraph STANDARD ACTIVITY CODING STRUCTURE

3.12 PRIMAVERA P6 MANDATORY REQUIREMENTS

If Primavera P6 is being used, request a backup file template (.xer) from the Government, if one is available, prior to building the schedule. The

following settings are mandatory and required in all schedule submissions to the Government:

a. Activity Codes must be Project Level, not Global or EPS level.

b. Calendars must be Project Level, not Global or Resource level.

c. Activity Duration Types must be set to "Fixed Duration & Units".

d. Percent Complete Types must be set to "Physical".

e. Time Period Admin Preferences must remain the default "8.0 hr/day, 40 hr/week, 172 hr/month, 2000 hr/year". Set Calendar Work Hours/Day to 8.0 Hour days.

f. Set Schedule Option for defining Critical Activities to "Longest Path".

g. Set Schedule Option for defining progressed activities to "Retained Logic".

h. Set up cost loading using a single lump sum labor resource. The Price/Unit must be $1/hr (€1/hr for contracts awarded in Euro), Default Units/Time must be "8h/d", and settings "Auto Compute Actuals" and "Calculate costs from units" selected.

i. Activity ID's must not exceed 10 characters.

j. Activity Names must have the most defining and detailed description within the first 30 characters.

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SECTION 01 33 00

SUBMITTAL PROCEDURES (NAU)
04/18

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager and the Designer of Record, if applicable, shall check and approve all items prior to submittal. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; and warranties.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals which are required prior to start of construction (work) or the start of the next major phase of the construction on a multi-phase contract, includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

Construction progress schedule

Network Analysis Schedule (NAS)

Submittal register

Health and safety plan

Work plan

Quality Control(QC) plan

Environmental protection plan

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except SD-01 Pre-Construction Submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor QC approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Codes are: "AE" for Architect-Engineer; "DO" for District Office; "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office.

Submit the following in accordance with this section.

SD-01 Preconstruction Submittals

Submittal Register; G

1.4 SUBMITTAL CLASSIFICATION (DESIGN-BUILD)

Submittals on Design-Build projects are classified as follows:

1.4.1 Design and Design Related Submittals

Designer of Record (DOR) approval is required for design, extensions of design, critical materials, any deviations from the solicitation, the accepted proposal, the completed design, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings." Design submittals to be in accordance with Section 01 33 16 DESIGN AFTER AWARD. Generally, design submittals should be identified as SD-05 Design Data submittals.

All DOR approved submittals will be submitted either as Designer of Record Approved/Government Approved (DA/GA) or Designer of Record Approved/Government Conformance Review (DA/CR) as described below.

1.4.1.1 Designer of Record Approved/Government Approved (DA/GA)

Government approval is required for any deviation, variation, or substitution, as well as other items designated by the Contracting Officer.

1.4.1.2 Designer of Record Approved/Government Conformance Review (DA/CR)

Any DOR approved submittal not specifically identified elsewhere as Government Approved (DA/GA) is considered DA/CR. Review will be only for conformance with the applicable codes, standards and contract requirements.

Generally, design submittals should be identified as SD-05 Design Data submittals. Design data includes the design documents described in Section 01 33 16 DESIGN AFTER AWARD.

1.4.2 Non-Design Related Submittals

Any submittal which is not considered design or design related as described above shall be classified either as Government Approved (G) or For Information Only (FIO).

1.4.2.1 Government Approved (G)

Government approval is required for all non-design related deviations, substitutions, variations, and other items as designated by the Contracting Officer.

1.4.2.2 For Information Only (FIO)

All submittals not requiring DOR or Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.4.3 Sustainability Reporting Submittals (S)

Submittals for Guiding Principle Validation (GPV) or Third Party Certification (TPC) are indicated with an "S" designation. Submit the information required by the technical sections that demonstrates compliance with the sustainable requirement, and for inclusion in the Sustainability eNotebook as required by Section 01 33 29 SUSTAINABILITY REPORTING. A full submittal for an item may be provided under another SD; however, for the "S" submittal, only provide that portion of the submittal that demonstrates compliance with the sustainable requirement. If the sustainable submittal does require Government Approval, it may be tagged under another SD with a "G."

Schedule submittals for these items throughout the course of construction as provided; do not wait until closeout.

1.5 SUBMITTAL CLASSIFICATION (DESIGN-BID-BUILD)

Submittals on Design-Bid-Build projects are classified as follows:

1.5.1 Government Approved (G)

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings."

1.5.2 For Information Only

Submittals not requiring Government approval will be for information only.

They are not considered to be "shop drawings" within the terms of the Contract Clause referred to previously.

1.5.3 Sustainability Reporting Submittals (S)

Submittals for Guiding Principle Validation (GPV) or Third Party Certification (TPC) are indicated with an "S" designation. Submit the information required by the technical sections that demonstrates compliance with the sustainable requirement, and for inclusion in the Sustainability eNotebook as required by Section 01 33 29 SUSTAINABILITY REPORTING. A full submittal for an item may be provided under another SD; however, for the "S" submittal, only provide that portion of the submittal that demonstrates compliance with the sustainable requirement. If the sustainable submittal does require Government Approval, it may be tagged under another SD with a "G."

Schedule submittals for these items throughout the course of construction as provided; do not wait until closeout.

1.6 PREPARATION

1.6.1 Transmittal Form

Use the ENG Form 4025-R which is automatically generated in RMS (CM) for all submittals. All fields shall be completed.

1.6.2 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. Compile the submittal file as a single, complete document, to include the ENG 4025-R. Name the electronic submittal file specifically according to its contents, coordinate the file naming convention with the Contracting Officer. Electronic files must be of sufficient quality that all information is legible.

All documents shall be submitted in PDF format. All drawings shall be submitted in both PDF and DWG (AutoCAD, latest version) format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is both searchable and can be copied. If documents are scanned, Optical Character Resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file.

RMS (CM) shall be used to transmit the electronic files to the Government. Additionally, the ProjNet (Dr. Checks) system may also be required to be used for transmittals at the discretion of the Government.

1.6.3 Contractor Approval

The Contractor Quality Control System Manager and for Design-Build contracts, the Designer of Record, are to stamp and sign the ENG 4025-R to certify that the submittal meets contract requirements.

Electronically submitted transmittals must include a valid electronic signature or scan of a signature.

1.7 QUANTITY OF SUBMITTALS

Unless a different quantity is identified elsewhere in a technical section, up to three hard copies of any submittal may be requested at the discretion of the Contracting Officer, at no additional cost to the Government. Sizes and number of copies identified in other contract documents govern over the sizes and quantities indicated herein.

Drawings shall be in ANSI D or A1 size, and all other documents shall be printed on A4 or US 8.5" x 11" paper. Documents shall be provided in binders or otherwise bound: loose documents are prohibited.

1.7.1 Number of Copies of SD-02 Shop Drawings

Submit three copies of submittals of shop drawings.

1.7.2 Number of Samples SD-04 Samples

a. Submit two samples, or two sets of samples showing range of variation, of each required item. One approved sample or set of samples will be retained by approving authority and one will be returned to Contractor.

b. Submit one sample panel or provide one sample installation where directed. Include components listed in technical section or as directed.

c. Submit one sample installation, where directed.

d. Submit one sample of non-solid materials.

1.7.3 Number of Copies SD-05 Design Data

Submit in compliance with quantity requirements specified for shop drawings.

1.7.4 Number of Copies SD-06 Test Reports and SD-09 Manufacturer's Field Reports

Submit in compliance with quantity and quality requirements specified for shop drawings with the exception of field test results which shall be submitted with QC reports.

1.8 INFORMATION ONLY SUBMITTALS

Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.9 SUBMITTAL REGISTER

Within 30 calendar days of Notice to Proceed, provide for Contracting Officer approval the following schedule of submittals:

a. A schedule of shop drawings and technical submittals required by the specifications and drawings. Indicate the specification or drawing reference requiring the submittal; the material, item, or process for which the submittal is required; the "SD" number and identifying title of the submittal; the Contractor's anticipated submission date and the approval need date.

b. A separate schedule of other submittals required under the contract but not listed in the specifications or drawings. Schedule will indicate the contract requirement reference; the type or title of the submittal; the Contractor's anticipated submission date and the approved need date (if approval is required).

Maintain a submittal register for the project in accordance with Section 01 45 01 RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)). All submittal items shall be identified in the register and every transmittal will be recorded and submitted through RMS.

1.10 DEVIATIONS, SUBSTITUTIONS, AND VARIATIONS

Unless prohibited or provided for otherwise elsewhere in the Contract, deviations, substitutions, and variations from contract requirements will be considered where advantageous to Government. As used in this context, the terms are used interchangeably and include:

a. Changes to the contractors accepted proposal

b. Changes to the contractors accepted design (Design-Build projects) or extensions of design, including shop drawings (all projects)

c. Changes to products, systems, materials or equipment by manufacturer, brand name and/or by model number or other specific identification identified in the contractors proposal or accepted design.

1.10.1 Required Approval

The contractor shall obtain Government approval prior proceeding with material acquisition or installation. Include substantiation the proposed item meets the contract requirements and that it is equal in function, performance, quality and salient features to the original item.

For contractor prepared designs or extensions of design, the Government will not agree to or provide a preliminary opinion without the DOR's approval or recommended approval.

A contract modification is also required before the Contractor is authorized to proceed with material acquisition or installation for any proposed variation to which constitutes a change to the contract terms. Within the terms of the Contract Clause SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, they are considered to be "shop drawings."

The Government reserves the right to accept or reject any proposed deviation at its discretion.

1.10.2 Considerations

Discussion with Contracting Officer prior to submission, after consulting with the DOR, will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation

which results in lower cost, consider submission of a Value Engineering Change Proposal (VECP).

Specifically point out variations from contract requirements in transmittal letters. Failure to point out deviations may result in the Government requiring rejection and removal of such work at no additional cost to the Government.

1.10.3 Proposing Variations

When proposing variation, deliver written request to the Contracting Officer, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to Government, including the DOR's written analysis and approval. If lower cost is a benefit, also include an estimate of the cost savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation.

Check the column "variation" of ENG Form 4025 for submittals which include proposed deviations requested by the Contractor. Set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.10.4 Warranting that Variations are Compatible

When delivering a variation for approval, Contractor, including its Designer(s) of Record, warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work.

1.11 SCHEDULING

Schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Include certifications to be submitted with the pertinent drawings at the same time. No delay damages or time extensions will be allowed for time lost in late submittals.

a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential resubmittal of requirements.

b. Each transmittal item in the submittal register shall be linked to the appropriate activity from the project schedule in RMS to determine the submittal needs dates on the register. Any lead time, procurement period, and review days shall be coordinated between RMS and the project schedule.

c. Carefully control procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

1.11.1 Review Periods

The contractor shall allow, and the project schedule shall account for the following review periods for submittals. The review period starts upon receipt of the submittal by the Government.

DA/GA: 30 calendar days

DA/CR: 21 calendar days

G: 30 calendar days
FIO or S: Although not required to be approved, for information only submittals allow review period of 14 calendar days for return of submittal to the Contractor

The Government shall have 30 calendar days to review any item requiring resubmission, regardless of the submittal type.

1.11.2 No Impact on Schedule

No extension to the contract performance period or to any interim completion date or milestone will be allowed for:

a. Any periods associated with re-submittals

b. Denial or delayed approval of any variation

1.12 CONTRACTOR RESPONSIBILITIES

1.12.1 Reviewing, Certifying, Approving Authority

The QC organization is responsible for reviewing and certifying submittals are in compliance with contract requirements. Approving authority on submittals is QC Manager unless otherwise specified.

All design and design related submittals also require the contractors DOR approval.

1.12.2 Related Items

Submit complete submittals for each definable feature of work. Submit at the same time components of definable feature interrelated as a system.

When acceptability of a submittal is dependent on conditions, items, or materials included in separate subsequent submittals, submittal will be returned without review.

Approval of a separate material, product, or component does not imply approval of assembly in which item functions

1.12.3 QC Organization Responsibilities

The contractor shall approve all submittals prior to submission to the Government. Prior to submission, the contractors QC Manager shall:

a. Review each submittal to ensure coordination with requirements of work, project design concepts, and contract documents

b. Sign certifying statement or approval statement. The QC organization member designated in the approved QC plan is the person signing certifying statements. The use of electronic signature, original ink or stamped signature is acceptable

1.13 GOVERNMENT REVIEW OF TRANSMITTALS

1.13.1 Review Notations

Submittals will be returned to the Contractor with the following notations:

a. Submittals marked "approved" or "accepted" authorize the Contractor to proceed with the work covered. (RMS codes: "A", "D", "F", "R", or "K"

b. Submittals marked "approved as noted" or "approved, except as noted, resubmittal not required," authorize the Contractor to proceed with the work covered provided they take no exception to the corrections. (RMS code "B").

c. Submittals marked "approved, resubmission required" authorize the contractor to proceed only with the portions of the work which do not require resubmission. (RMS code "C")

c. Submittals marked "not approved" or "disapproved," or "revise and resubmit," indicate noncompliance with the contract requirements or design concept, or that submittal is incomplete. (RMS codes "E", "X").Resubmit with appropriate changes. No work shall proceed for this item until resubmittal is approved.

1.14 DISAPPROVED OR REJECTED SUBMITTALS

Make corrections required by the Contracting Officer. If the Contractor considers any correction or notation on the returned submittals to constitute a change to the contract drawings or specifications; notice as required under the FAR clause entitled CHANGES, is to be given to the Contracting Officer. Contractor is responsible for the dimensions and design of connection details and construction of work.

If changes are necessary to submittals, make such revisions and submission of the submittals in accordance with the procedures above. No item of work requiring a submittal change is to be accomplished until the changed submittals are approved.

1.15 APPROVED/ACCEPTED SUBMITTALS

The Contracting Officer's approval or acceptance of submittals is for contract conformance only and shall not be construed as a complete check. The Contractor remains solely responsible for performing quality control, fully adhering to the requirements of the contract.

After submittals have been approved or accepted by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless approved in accordance with paragraph DEVIATIONS, SUBSTITUTIONS, AND VARIATIONS.

1.16 APPROVED SAMPLES

Approval of a sample is only for the characteristics or use named in such approval and is not be construed to change or modify any contract requirements. Before submitting samples, the Contractor to assure that the materials or equipment will be available in quantities required in the project. No change or substitution will be permitted after a sample has been approved.

Match the approved samples for materials and equipment incorporated in the work. If requested, approved samples, including those which may be damaged in testing, will be returned to the Contractor, at his expense, upon completion of the contract. Samples not approved will also be returned to the Contractor at its expense, if so requested.

Failure of any materials to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material. Government reserves the right to disapprove any material or equipment which previously has proved unsatisfactory in service.

Samples of various materials or equipment delivered on the site or in place may be taken by the Contracting Officer for testing. Samples failing to meet contract requirements will automatically void previous approvals. Contractor to replace such materials or equipment to meet contract requirements.

Approval of the Contractor's samples by the Contracting Officer does not relieve the Contractor of his responsibilities under the contract.

1.17 WITHHOLDING OF PAYMENT

No payment for materials incorporated in the work will be made if all required Designer of Record or required Government approvals have not been obtained. No payment will be made for any materials incorporated into the work for any conformance review submittals or information only submittals found to contain errors or deviations from the Solicitation or Accepted Proposal.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

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SECTION 01 33 16

DESIGN AFTER AWARD (NAU)
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PART 1 GENERAL

1.1 SUMMARY

After award, develop the completed design, as described herein and in Section 01 10 10 STATEMENT OF WORK. Use a collaborative, integrated design process for all stages of project delivery. Consider all stages of the building lifecycle, including deconstruction, rehabilitation, re-purposing, or demolition.

1.2 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

ERDC/ITL TR-12-1 (2015) A/E/C Graphics Standard, Release 2.0

Additional references are included in Section 01 10 10 Statement of Work.

1.3 DESIGN CRITERIA

In addition to FAR clauses 52.236-23 RESPONSIBILITY OF THE ARCHITECT-ENGINEER CONTRACTOR, 52.236-24 WORK OVERSIGHT IN ARCHITECT-ENGINEER CONTRACTS, and DFARS clauses 252.227-7022 and 252.227-7033 RIGHTS IN SHOP DRAWINGS, the Contractor must provide design in accordance with current Host Nation standards and building codes, and as described in the contract. The Contractor is responsible for obtaining any referenced documents, and must make them available to the COR upon request. The Contractor must utilize the latest edition of each standard, unless otherwise specified.

1.4 DEFINITIONS

1.4.1 Designer of Record (DOR)

Professional Registered members of the Contractor’s Design-Build team that check, approve, sign, date, and certify, prior to submitting the deliverables to the Government, that the D-B design submittals comply with the contract requirements. Design shall be performed under the general supervision of the DOR (i.e. Registered Architect, Registered Professional Engineer, or other recognized consultant) and approved by the same. The DOR must be legally licensed to perform design work in the jurisdiction the construction is performed.

The DOR(s) stamp, sign, and date each design drawing and other design deliverables under their responsible discipline at each design submittal stage. The DOR(s) are responsible for maintaining the integrity of the design and for compliance with the contract requirements through construction and documentation of the as-built condition by coordination,

review and approval of extensions of design, material, equipment and other construction submittals, review and approval or disapproval of requested deviations to the accepted design or to the contract, coordination with the Government of the above activities, and by performing other typical professional design responsibilities.

PART 2 PRODUCTS

2.1 GOVERNMENT FURNISHED MATERIALS

There are no government Furnished Materials for design unless specifically identified in 01 10 10 STATEMENT OF WORK. The Government makes no representation of the existence of surveys, reports, or as-constructed drawings, except as specifically noted in that section.

The contractor shall be solely responsible for obtaining any documents not explicitly provided by the Government prior to award and included in the award documents.

2.2 SUBMITTAL REQUIREMENTS

2.2.1 Package Requirements

At each design milestone identified in Section 01 10 10 STATEMENT OF WORK , provide a complete Design Package that includes:

a. Design Drawings

b. Specifications

c. Design Analysis including attachments described below

c.1. Design Analysis Attachment 1: With the exception of the first submittal, include all previous comments, Contractor and Government responses, and the specific resolution of each comment.

c.2. Design Analysis Attachment 2: Contractor's completed discipline-specific checklists as described in Section 01 45 10 DESIGN QUALITY CONTROL

c.3. Design Analysis Attachment 3: Minutes of meetings, review conferences, and discussions (whether verbal or electronic) with Government personnel regarding the design which were not included in a previous Design Package.

Incomplete packages will not be accepted and will be returned without review or comment.

2.2.2 Document Language

All submittal documents must be provided in both the Host Nation language and English, with the exception of the Design Analysis. The Design Analysis is only required in English with the exception of any documents which are required by the Host Nation to be submitted in the local language.

If a document cannot contain both languages side-by-side, then two identical copies of the document must be provided, one in the Host National language and one in English.

2.2.3 Units

The design, and all design submittal documents, must be developed using the metric system.

2.3 DESIGN DRAWINGS

Provide Design Drawings as described in Specification 01 10 10 STATEMENT OF WORK. In addition to technical drawing sheet requirements, provide general sheets that tie the project together. These sheets include, but are not limited to (1) title sheet; (2) index sheet(s) identifying each sheet reference number, sheet number, and sheet title; and (3) vicinity map.

2.3.1 Graphics Standard

Provide drawings that meet the graphics standard of ERDC/ITL TR-12-1 A/E/C Graphics Standard, including but not limited to title blocks, text size, orientation, scale bars, and north arrows. All drawings must use an A1 sheet size.

2.3.2 Electronic Drawing Files

Provide electronic drawing files in PDF and .dwg format for each project drawing in the design set.

Bundle PDF drawings into one PDF file per design package. Separate .dwg drawing files shall be provided.

2.4 SPECIFICATIONS

Provide design specifications that, in conjunction with the drawings, allow for a complete understanding and constructability of all project features, including materials, dimensions, quantities, qualities, colors, codes, and other relevant values. The Specifications must demonstrate project compliance with materials, equipment, execution, and quality control requirements of the RFP and accepted proposal.

2.4.1 Manufacturer's Product Data and Instructions Used as Specifications

Manufacturer's product data and installation instructions may be used as specifications. Provide complete and legible catalog cut sheets, product data, installation instructions, operation and maintenance instructions, warranty, and certifications for products and equipment for which final material and equipment choices have been made. Indicate, by prominent notation, each product that is being submitted, including optional manufacturer's features. Indicate where the product data shows compliance with the Contract requirements.

2.4.2 Submittal Register

Develop the Construction submittal requirements during the design phase of the contract, by producing a Submittal Register in accordance with Section 01 33 00 Submittal Procedures. Include the Submittal Register as an Attachment to the Specifications.

2.4.3 Specifications Packaging

Provide specifications to include the following:

a. Cover sheet that includes project name, location, and contract number.

b. Project table of contents (including all attachments).

c. Specification sections divided by work trades, design disciplines, and/or features of work. Each section must have a unique number and title. Include a table of contents for each section. Divide each Section into 3 parts (General, Products, and Execution).

d. Within each section, paragraphs describing materials, equipment,references, execution, and quality control requirements. Provide a unique number and title for each paragraph. The number must start with the section number it falls under.

e. Attachments, including manufacturer's product data, permits, etc. Include attachment referenced within the specification section.

f. Continuous page numbers throughout the document.

2.4.4 Specification Deliverable

Submit a bundled specification package in PDF format for each design package.

2.5 DESIGN ANALYSIS

See Section 01 10 10 STATEMENT OF WORK for specific design analysis requirements for this project.

Provide a Design Analysis that documents the general parameters, functional and technical requirements, design objectives, and design assumptions for all project features. The Design analysis is not only used for review of the design, but for record purposes. Documentation includes narrative, calculations, photographs, sketches, and catalog cut sheets. For each project feature, reference all applicable regulations, standards, and criteria for the design. Reference sources are subject to Government approval.

2.5.1 Operations and Maintenance (O&M) Provisions

Identify design features made to enhance, and to reduce the cost of, operating and maintaining the facility when completed. Identify any special safety considerations or occupational health related considerations that may affect operation and maintenance activities as a result of the final design. Discuss alternative systems considered, and provide rationale for the selected alternative, including an indication of how the initial costs and life cycle costs were factored into final selections.

2.5.2 Design Analysis Packaging

2.5.2.1 Assembly and Identification

Assemble design analysis in a single volume with a table of contents if possible. Include a cover page in the basis of design for each discipline indicating the project title and locations, contract number, table of contents, and tabbed separations or bookmarks for quick reference. At a minimum tab or bookmark for each discipline.

a. Cover sheet that includes project name, location, and contract

number

b. Table of contents

c. Sections for each design disciplines and/or features of work.

d. Attachments

e. Continuous page numbers throughout the document

2.5.2.2 Electronic Format

Submit a bundled specification package in PDF format for each design package.

2.5.3 Designer of Record Approval

Place the signature and seal of the Designer of Record responsible for the work on the cover page of the calculations for the respective design discipline.

PART 3 EXECUTION

3.1 DESIGN QUALITY CONTROL

A Design Quality Control Plan in accordance with Section 01 45 10 DESIGN QUALITY CONTROL (NAU) must be approved before design may proceed. As part of the design process, ensure quality control and review prior to submitting design packages for Government review.

3.2 DESIGN SCHEDULE

Submit a project Schedule in accordance with Section 01 32 01 PROJECT SCHEDULE or 01 32 16 SMALL PROJECT PROGRESS SCHEDULE including design activities. Refer to the contract documents to determine which section is applicable to this contract.

3.3 INVOLVEMENT OF KEY PERSONNEL

Actively involve the Contractor's construction management key personnel during the design process to effectively integrate the design and construction requirements of this contract. The Contractor's involvement includes, but is not limited to, actions such as: integrating the design into the schedule, ensuring constructability and economy of the design, integrating the shop drawing process into the design, executing the material and equipment acquisition to meet the schedule, effectively interfacing the construction and design QC program, and maintaining and providing the design team with accurate, up-to-date redline and as-built documentation.

3.4 MEETINGS AND REVIEW CONFERENCES

See Section 01 10 10 STATEMENT OF WORK for design conference requirements.

Prepare a written record of each design site visit, meeting, or conference, either telephonic or personal. The written record must include subject, names of participants, outline of discussion, and recommendation or conclusions. Number records in consecutive order.

Documents shall be provided electronically via RMS-CM and documented as official correspondence via serial letter within 5 work days of the applicable event.

3.5 ACCEPTANCE AND RELEASE FOR CONSTRUCTION

All design submittals, to include all Design Drawings, Specifications, and the Design Analysis must be completed, reviewed, and returned to the contractor prior to the beginning of construction.

Any portion of the design requiring resubmittal shall not be considered acceptable for release to constructIon without written authorization from the Contracting Officer.

Should the contractor proceed with work prior to completion of design or written authorization from the Contracting Officer to proceed prior to completion of the design, progress and payment may be disallowed for those portions of the work.

Government review and acceptance of design submittals is for contract conformance only and does not relieve the Contractor from responsibility to fully adhere to the requirements of the contract, including the Contractor's accepted proposal, or limit the Contractor's responsibility of design as prescribed under Special Contract Requirement: "Responsibility of the Contractor for Design" or limit the Government's rights under the terms of the contract. The Government reserves the right to rescind inadvertent acceptance of design submittals containing contract deviations not separately and expressly identified in the submittal for Government consideration and approval.

3.6 DESIGN DISCREPANICES DURING CONSTRUCTION

The Contractor is responsible for the correction of incomplete design data, omissions, and design discrepancies which become apparent during construction. The Contractor must provide a proposed recommendation for correcting a design error, within three (3) calendar days after identification of the discrepancy.

The Contractor must, without additional compensation, correct or revise any errors or deficiency in its designs, and perform any necessary construction rework, including any damage to real or personal property, resulting from the design error or omission.

If the Contractor fails to correct the discrepancy or refuses to comply promptly with any directions given by the Government, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders must be made the subject of claim for extension of time or for excess costs or damages by the Design-Build Contractor.

-- End of Section --

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SAFETY REQUIREMENTS (NAU)

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SECTION 01 35 26

SAFETY REQUIREMENTS (NAU)
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PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM F855	(2015) Standard Specifications for Temporary Protective Grounds to Be Used on De-energized Electric Power Lines and Equipment

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 1048	(2003) Guide for Protective Grounding of Power Lines

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 51B	(2014) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70	(2017; ERTA 1-2 2017; TIA 17-1; TIA 17-2) National Electrical Code
NFPA 70E	(2015; ERTA 1 2015) Standard for Electrical Safety in the Workplace

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual

1.2 REQUIREMENTS

This specification shall be read and implemented in conjunction with the most recent version of EM 385-1-1 which is an integral part of this contract.

Failure to comply with the requirements of this specification, including the contractors Accident Prevention Plan (APP) after its acceptance by the Contracting Officer, will be considered sufficient cause for stopping any or all work until satisfactory compliance has been achieved.

1.3 HOST NATION REQUIREMENTS

The requirements of this specification are in addition to and separate from those mandated by host nation or local laws, including, but not limited to, the requirements of the European Union Council Directive 92/57/EEC of 24

June 1992 on the implementation of minimum safety and health requirements at temporary or mobile construction sites for projects located in the European Union. Each country within the European Union may have established additional requirements necessary to comply with this directive, and the contractor shall comply with those regulations as part of this contract.

The contractor shall prepare and submit to the Host Nation authorities all required plans and provide all personnel (including third party coordinators) unless specifically identified elsewhere in this contract as to be provided by the Government. These plans are not to be submitted to the Contracting Officer, and the Contractor remains solely liable for validating and monitoring compliance with those plans.

Any personnel required to comply with Host Nation requirements, including third party coordinators are to be provided by the contractor, unless specifically identified elsewhere in this contract as being provided by the US Government. They are separate from and do not negate the requirements of the Site Safety and Health Officer described in this specification. No additional payment will be made for compliance with Host Nation requirements.

1.4 DEFINITIONS

The following definitions apply only in the context of this specification and shall not change or infer a meaning on any other document made part of this contract either directly or via reference.

1.4.1 Controlling Authority

Contractors are the "Controlling Authority", responsible for all work site safety and health, including that of subcontractors and shall inform all subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out

1.4.2 High Risk Activity

A "High Risk Activity" is an activity that by its nature constitutes an elevated risk of severe or life-threatening injuries. Typical activities include confined space, cranes and rigging, excavation/trenching, fall protection, and medium or high voltage electrical work.

1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

JOC Accident Prevention Plan (APP); G,DO

Project Accident Prevention Plan (APP); G,DO

Host Nation Equivalent Training; G,DO

Activity Hazard Analysis (AHA) for each DFOW; G 21 calendar day review.

SD-06 Test Reports

Notifications and Reports

Accident Reports; G,DO

1.6 LABOR EXPOSURE REPORTS

The contractor shall report on each QC Report prepared in accordance with 01 45 00 Quality Control the labor hours for all site workers, both Prime and subcontractor, worked on the project for the reporting period.

Prior to submitting an invoice, the contractor shall verify all labor hours for the invoice period. When RMS Contractor Mode (RMS-CM) (Section 01 45 01) is used, no separate report is required.

Failure to provide the required information may result in retention of up to 10 percent of the voucher.

1.7 REGULATORY REQUIREMENTS

Nothing in this specification shall alleviate the contractors responsibility to comply with all applicable local and national (host nation) laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.8 CONTRACTOR SAFETY ORGANIZATION AND PERSONNEL

The contractor shall provide a Safety Organization in accordance with Section 01 45 05 CONTRACTOR QUALITY CONTROL AND SAFETY PERSONNEL REQUIREMENTS or Section 01 45 06 SMALL PROJECT CONTRACTOR QUALITY CONTROL AND SAFETY PERSONNEL REQUIREMENTS. Refer to the contract documents for the version(s) applicable to this contract.

Maintain the Safety Organization at full strength at all times. When it is necessary to make changes to the Safety Organization , revise the Project APP Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

1.8.1 Personnel Qualifications

All Safety Personnel shall meet the applicable requirements of EM 385-1-1. To meet these requirements, they must have the required training, experience, and qualifications in accordance with EM 385-1-1 Section 01.A.17, and all associated sub-paragraphs. All information required to support their acceptability for the position to which they are appointed on the project shall be included in the Project Accident Prevention Plan described herein.

If Host Nation Equivalent Training is substituted for the training requirements of EM 385-1-1, course information and description shall be

submitted through the COR to the Europe District Safety Office for review of acceptability prior to appointment.

1.9 PROJECT ACCIDENT PREVENTION PLAN(APP)

A Competent Person (CP) must prepare the written project specific APP. Prepare the APP in accordance with the format and requirements of EM 385-1-1, Appendix A, and as supplemented herein. Cover all paragraph and subparagraph elements in EM 385-1-1, Appendix A. The SSHO must provide and maintain the APP and a log of signatures by each subcontractor foreman, attesting that they have read and understand the APP, and make the APP and log available on-site to the Contracting Officer.

Submit the APP to the Contracting Officer at least 30 calendar days prior to the date of the Preconstruction Conference for acceptance. Construction work shall not proceed without an accepted APP. Once reviewed and accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Continuously review and amend the APP, as necessary, throughout the life of the contract. Changes to the accepted APP must be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and Quality Control Manager. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered

1.9.1 Additional Language Requirements

All APP's shall be prepared in the English language, however they shall identify the expected native languages of the workers and address how the information contained therein will be provided to all non-native English speakers.

1.9.2 Names and Qualifications

Include in the APP the names and qualifications (e.g. resumes including education, training, experience and certifications) of site safety and health personnel. Specify the duties of each position and include the appointment letter.

When applicable, designate and submit qualifications of Qualified Persons (QP) and CPs for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; and personal protective equipment and clothing to include selection, use and maintenance.

1.9.3 Additional Plans

Provide additional plans in the APP in accordance with the requirements outlined in Appendix A of EM 385-1-1. The contractor shall complete Form A-02 and include it with their APP.

1.10 JOC ACCIDENT PREVENTION PLAN (APP)

For all Job Order Contracts (JOC's) a Qualified Person shall prepare an APP explaining the overall management of the entire contract, prior to performing any work on any task order. This JOC APP must provide the contractors overall organizational structure, processes, and procedures which generally apply to all task orders and will not require resubmittal

or re-acceptance prior to work on a task order.

The contractor shall prepare a project specific APP for each task order identifying the specific safety personnel and their qualifications; and hazards applicable to the task order. The project specific APP must be accepted prior to the performance of any construction work for the task order.

1.11 ACTIVITY HAZARD ANALYSIS (AHA)

Before beginning each Definable Feature of Work (DFOW) or where a new work crew or subcontractor is to perform the work, the Contractor(s) performing that work activity must prepare an AHA. AHA's must be developed by the Prime Contractor, subcontractor, or supplier performing the work, and provided for Prime Contractor review and approval before submitting to the Contracting Officer. AHA's must be signed by the SSHO, Superintendent, QC Manager and the subcontractor Foreman performing the work. Format the AHA in accordance with EM 385-1-1, Section 01. Submit the AHA for review at least 21 calendar days prior to the Preparatory Meeting (see 01 45 00 Quality Control) for the DFOW. The Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

AHA's must identify competent persons (CP) required for work involving high risk activities. The CP shall also sign the AHA.

1.11.1 AHA Management

Review the AHA list periodically (at least monthly) at the Contractor supervisory safety meeting, and update as necessary when procedures, scheduling, or hazards change. Use the AHA during inspections by the SSHO to ensure the implementation and effectiveness of the required safety and health controls for that work activity.

1.11.2 AHA Signature Log

Each employee performing work as part of a DFOW must review the AHA for that work and sign a signature log specifically maintained for that AHA prior to starting work on that activity. The SSHO must maintain a signature log on site for every AHA. Provide employees whose primary language is other than English with an interpreter to ensure a clear understanding of the AHA and its contents.

1.12 DISPLAY OF SAFETY INFORMATION

1.12.1 Safety Bulletin Board

Within one calendar day after commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, may be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, Section 01.A.07.

1.12.2 Safety and Occupational Health (SOH) Deficiency Tracking System

Establish a SOH deficiency tracking system that lists and monitors the status of SOH deficiencies in chronological order. Use the tracking system to evaluate the effectiveness of the APP. If RMS-CM is being used, the QA/QC Deficiencies screens of RMS-CM shall be used as the SOH deficiency tracking system.

A monthly evaluation of the data must be discussed in the QC or SOH meeting with everyone on the project. The list must be posted on the project bulletin board and updated daily, and provide the following information:

a. Date deficiency identified;

b. Description of deficiency;

c. Name of person responsible for correcting deficiency;

d. Projected resolution date;

e. Date actually resolved.

1.13 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.14 NOTIFICATIONS and REPORTS

1.14.1 Mishap Notification

Notify the Contracting Officer as soon as practical, but no more than twenty-four hours, after any mishaps, including recordable accidents, incidents, and near misses, as defined in EM 385-1-1 Appendix Q, any report of injury, illness, or any property damage. For LHE or rigging mishaps, notify the Contracting Officer as soon as practical but not more than 4 hours after mishap. The Contractor is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. Immediate reporting is required for electrical mishaps, to include Arc Flash; shock; uncontrolled release of hazardous energy (includes electrical and non-electrical); load handling equipment or rigging; fall from height (any level other than same surface); and underwater diving. These mishaps must be investigated in depth to identify all causes and to recommend hazard control measures.

Within notification include Contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (for example, type of construction equipment used and PPE used). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted. Assist and cooperate fully with the Government's investigation(s) of any mishap.

1.14.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, property damage, and near misses as defined in EM 385-1-1,

to establish the root cause(s) of the accident. Complete the applicable USACE Accident Report Form 3394, and provide the report to the Contracting Officer within 5 calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

b. Near Misses: Record all "Near Misses" in the "Accident Reporting" section of the QC Report in RMS-CM. Do not mark the accident as "reportable" and begin the Description with "Near Miss". Near miss reports are considered positive and proactive Contractor safety management actions.

1.15 HOT WORK

1.15.1 Permit and Personnel Requirements

Submit and obtain a written permit prior to performing "Hot Work" (i.e. welding or cutting) or operating other flame-producing/spark producing devices, from the Responsible Authority. A permit is required from the Explosives Safety Office for work in and around where explosives are processed, stored, or handled. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. Provide at least two 9 kg 4A:20 BC rated extinguishers for normal "Hot Work". The extinguishers must be current inspection tagged, and contain an approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch must be trained in accordance with NFPA 51B and remain on-site for a minimum of one hour after completion of the task or as specified on the hot work permit.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency phone numbers. REPORT ANY FIRE, NO MATTER HOW SMALL, TO THE RESPONSIBLE AUTHORITIES IMMEDIATELY.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 RESPONSIBILITIES OF SAFETY PERSONNEL

3.1.1 Site Safety and Health Officer

The SSHO shall:

a. Conduct safety and health inspections during every visit to a project site. Inspections shall be conducted daily when the SSHO is on site.

b. For every inspection, document in the Safety narrative of the QC Report the feature of work inspected, relevant safety observations, identified hazards, recommended corrective actions, estimated and actual dates of corrections.

c. Maintain the Safety and Occupational Health (SOH) Deficiency Tracking System described in paragraph 1.11.2.

d. Conduct mishap investigations and complete required accident reports. Report mishaps and near misses.

e. Maintain applicable safety reference material on the job site.

f. Attend the pre-construction conference, pre-work meetings including preparatory meetings, and periodic in-progress meetings.

g. Review the APP and AHA's for compliance with EM 385-1-1, and approve, sign, implement and enforce them.

h. Ensure subcontractor compliance with safety and health requirements.

i. Provide and keep a record of site safety orientation and indoctrination for Contractor employees, subcontractor employees, and site visitors.

3.1.2 Qualified Person

Provide Qualified Persons (QPs) as defined in EM 385-1-1, Appendix Q for the preparation and/or implementation of additional safety measures for high risk activities. The QP must be identified by name in the applicable plans.

3.1.3 Competent Person

Provide Competent Persons (CPs) to prepare the APP, AHA's, and oversee the implementation of additional safety related plans for high risk activities. The CP shall be identified in the applicable plan and must be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed.

3.2 MEETINGS

3.2.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project must attend the preconstruction conference. This includes the project superintendent, Site Safety and Occupational Health officer, quality control manager, or any other assigned safety and health professionals who participated in the development of the APP and special plans, program and procedures associated with it.

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHA's that will be developed and implemented during the performance of the contract.

3.2.2 Safety Meetings

Conduct meetings at least once a month for all supervisors on the project location.

The SSHO, supervisors, or foremen shall conduct meetings at least once a week for the trade workers.

Meetings shall include review of past activities, plan for new or changed operations, review pertinent aspects of appropriate AHA (by trade), establish safe working procedures for anticipated hazards, and provide pertinent Safety and Occupational Health (SOH) training and motivation.

Attach meeting minutes to the QC Report in RMS-CM. Meeting minutes shall

include the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting.

Notify the Contracting Officer of all scheduled meetings 7 calendar days in advance.

3.3 CONSTRUCTION AND OTHER WORK

3.3.1 Worksite Communication

Employees working alone in a remote location or away from other workers must be provided an effective means of emergency communications (i.e., cellular phone, two-way radios, land-line telephones or other acceptable means). The selected communication must be readily available (easily within the immediate reach) of the employee and must be tested prior to the start of work to verify that it effectively operates in the area/environment. An employee check-in/check-out communication procedure must be developed to ensure employee safety.

3.3.2 Imminent Dangers

Should any severe hazard exposure (i.e. imminent danger) become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate and remove the hazard. In the interim, take all necessary action to restore and maintain safe conditions.

3.4 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Provide and operate a Hazardous Energy Control Program (HECP) in accordance with EM 385-1-1.

3.5 FALL PROTECTION PROGRAM

Establish a fall protection program for the protection of all employees exposed to fall hazards in accordance with both EM 385-1-1 and Host Nation requirements.

3.6 RESCUE AND EVACUATION PLAN AND PROCEDURES

When operations with the potential of requiring rescues and/or evacuation procedures are performed (e.g., confined space entry, tower crane operations, operations requiring personal fall protection), the contractor shall ensure the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue or assisted-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility.

Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA). The plan must comply with the requirements of EM 385-1-1.

3.7 ELECTRICAL

Perform electrical work in accordance with EM 385-1-1.

3.7.1 Conduct of Electrical Work

As delineated in EM 385-1-1, electrical work is to be conducted in a de-energized state unless there is no alternative method for accomplishing the work. Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Attach temporary grounds in accordance with Host Nation Requirements. If no such requirement exists, temporary grounds shall be attached in accordance with ASTM F855 and IEEE 1048. Perform all high voltage cable cutting remotely using hydraulic cutting tool.

If work must be conducted on energized equipment, prior written authorization from the appropriate authorities is required. Provide information identified in EM 385-1-1 Section 11.

When racking in or live switching of circuit breakers, no additional person other than the switch operator is allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method.

When working in energized substations, only qualified electrical workers are permitted to enter. When work requires work near energized circuits as defined by NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves and electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA. Ensure that each employee is familiar with and complies with these procedures.

-- End of Section --

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 45 00

QUALITY CONTROL (NAU)

3/18

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SECTION 01 45 00

QUALITY CONTROL (NAU)
3/18

PART 1 GENERAL

1.1 PURPOSE

This section establishes the Quality Control requirements for construction projects and for the construction activities under a Design-Build contract. Section 01 45 10 Design Quality Control establishes additional Quality Control requirements for the design activities on a Design-Build contract.

1.2 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM D3740	(2012a) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E329	(2014a) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Quality Control (CQC) Plan; G

SD-07 Certificates

Testing Laboratory Certification

1.4 QUALITY CONTROL ORGANIZATION

Maintain the QC staff at full strength at all times. When it is necessary to make changes to Quality Control staff, revise the QC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

QC staff shall have complete authority and responsibility to take any action necessary to ensure Contract compliance.

All personnel are subject to acceptance by the Contracting Officer.

Provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional QC organization. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules and all other project documentation to the QC organization. The QC organization is responsible to maintain these documents and records.

1.5 CONSTRUCTION QUALITY CONTROL (CQC) PERSONNEL

1.5.1 Personnel

The contractor shall provide CQC Personnel in accordance with Section 01 45 05 CONTRACTOR SITE PERSONNEL REQUIREMENTS or Section 01 45 06 SMALL PROJECT CONTRACTOR SITE PERSONNEL REQUIREMENTS. Refer to the contract documents for the section applicable to this contract.

1.5.2 Training

The CQC System Manager, Alternate CQC System Manager, and CQC Designees are required to have completed the Construction Quality Management (CQM) for Contractors course. This course is periodically offered by the the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

The Construction Quality Management Training certificate expires after 5 years. No one may be appointed or continue to serve in a position requiring this training if their certificate has expired. Retaking the course is required to obtain a new certificate.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

3.1.1 Quality Control System Requirements

Establish and maintain an effective QC system. QC consist of plans, procedures, and organization necessary to produce an end product which complies with the Contract requirements. The QC system covers all operations, both onsite and offsite, and is keyed to the proposed sequence of operations necessary to perform all works required by the contract.

3.1.2 Content of Quality Control Plan

Include, as a minimum, the following to cover all activities, both onsite and offsite, including work by subcontractors fabricators, suppliers and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff will implement the three phase control system for all aspects of the work

specified.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a QC function.

c. A copy of the letter to the CQC SM signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC SM, including authority to stop work which is not in compliance with the Contract. Letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities will be issued by the CQC System Manager.

d. Procedures for scheduling, reviewing, certifying, and managing submittals. These procedures must be in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test.

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking deficiencies from identification through acceptable corrective action. Establish verification procedures that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and is identified by different trades or disciplines, or it is work by the same trade in a different environment. Although each section of the specifications can generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2 CONSTRUCTION QUALITY CONTROL (CQC) PLAN

Submit no later than 45 calendar days prior to mobilization and at least 14 calendar days prior to the coordination meeting discussed in paragraph COORDINATION MEETING, the Construction Quality Control (CQC) Plan.

Construction will be permitted to begin only after acceptance of an CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional work.

3.2.1 Acceptance of Plan

Acceptance of the CQC Plan plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance.

The Government reserves the right to require the Contractor to make changes in the CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.2 Notification of Changes

After acceptance of the CQC Plan, notify the Contracting Officer in writing of any proposed change via a revised submittal of the applicable plan. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

Prior to acceptance by the Government of the CQC Plan, meet with the Contracting Officer and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details must be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government, signed by both the Contractor and the Contracting Officer and will become a part of the contract file. There can be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings or address deficiencies in the CQC system or procedures which can require corrective action by the Contractor.

3.4 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall comply with the requirements in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.5 CONTROL

CQC is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control are required to be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.5.1 Preparatory Phase

This phase is performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase includes:

a. A review of each paragraph of applicable specifications, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.

b. Review of the Contract drawings.

c. Check to assure that all materials and equipment have been tested, submitted, and approved.

d. Review of provisions that have been made to provide required control

inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the Contract.

f. Examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. Review of the appropriate activity hazard analysis to assure safety requirements are met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. Check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government needs to be notified at least 48 hours in advance of beginning the preparatory control phase. Include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. Document the results of the preparatory phase actions by separate minutes prepared by the CQC System Manager and attach to the daily CQC report. Instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.5.2 Initial Phase

This phase is accomplished at the beginning of a definable feature of work. Accomplish the following:

a. Check work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing are in compliance with the contract.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government needs to be notified at least 48 hours in advance of beginning the initial phase for definable feature of work. Prepare separate minutes of this phase by the CQC System Manager and attach to the daily CQC report. Indicate the exact location of initial phase for definable feature of work for future reference and comparison with follow-up phases.

g. The initial phase for each definable feature of work is repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.5.3 Follow-up Phase

Perform daily checks to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. Record the checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work.

3.5.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.6 TESTS

3.6.1 Testing Procedure

Perform specified or required tests as required by the contract documents to verify that control measures are adequate to provide a product which conforms to contract requirements. to include compliance with any host nation testing requirements. Upon request, furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and acceptance tests when specified. Perform the following activities and record and provide the following data:

a. Verify that testing procedures comply with contract requirements.

b. Verify that facilities and testing equipment are available and comply with testing standards.

c. Check test instrument calibration data against certified standards.

d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Record results of all tests taken, both passing and failing on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the Contracting Officer, actual test reports are submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the Contracting Officer. Failure to submit timely test reports as stated results in nonpayment for related work performed and disapproval of the test facility for this Contract.

3.6.2 Testing Laboratories

All testing laboratories must be validated by the USACE Material Testing Center (MTC) for the tests to be performed in accordance with contract specified US Standards.

Tests required to show compliance with Host Nation standards or requirements shall be performed in accordance with certification standards required by that standard. The contractor shall provide Testing Laboratory Certification substantiating the laboratory is licensed or otherwise authorized by Host Nation authorities to perform the identified test.

3.6.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel are required to meet criteria detailed in ASTM D3740 and ASTM E329 or the Host Nation equivalent.

3.6.3 Onsite Laboratory

Should the contractor establish an onsite laboratory, the Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

Conduct an inspection of the work by the CQC System Manager near the end of the work, or any increment of the work established by a time stated in the contract clause, "Commencement, Prosecution, and Completion of Work", or by the specifications. Prepare and include in the CQC documentation a punch list of items which do not conform to the approved drawings and specifications, as required by paragraph DOCUMENTATION. Include within the list of deficiencies the estimated date by which the deficiencies will be corrected. Make a second inspection the CQC System Manager or staff to ascertain that all deficiencies have been corrected. Once this is accomplished, notify the Government that the facility is ready for the Government Pre-Final inspection.

3.7.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. Ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Correct any items noted on the Pre-Final inspection in a timely manner. These inspections and any deficiency corrections required by this paragraph need to be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.7.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative is required to be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands can also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notify the Contracting Officer at least 14 days prior to the final acceptance inspection and include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the Contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the Contract clause titled "Inspection of Construction".

3.8 DOCUMENTATION

3.8.1 Quality Control Activities

The contractor shall use the Resident Management System - Contractor Mode as required by Section 01 45 01 to maintain current records providing factual evidence that required quality control activities and tests have been performed. Include in these records the work of subcontractors and suppliers that includes, as a minimum, the following information:

- Weather conditions encountered.

- The number of personnel working and number of hours worked.

- Operating plant/equipment with hours worked, idle, or down for repair.

- Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.

- Test and control activities performed with results and references to specifications/drawings requirements. Identify the control phase (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

- Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.

- Submittals and deliverables reviewed, with Contract reference, by whom, and action taken.

- Offsite surveillance activities, including actions taken.

- Job safety evaluations stating what was checked, results, and instructions or corrective actions.

- Instructions given/received and conflicts in plans and specifications.

3.8.2 QC Report Preparation and Submission Requirements

3.8.2.1 Projects Using Section 01 45 05

When Section 01 45 05 CONTRACTOR SITE PERSONNEL REQUIREMENTS (NAU) is part of this contract, the contractor shall prepare a report documenting the above items for each day construction work occurs on site. When no construction work occurs, a report is not required provided the period of no work is less than 7 calendar days. The first report after the period of no work shall indicate the non-work period.

For all non-work periods of 7 days or longer, and during the Design phase of a Design-Build project where no construction is ongoing, the report shall be prepared at least weekly.

The report shall be prepared in RMS-CM and submitted through that system. Hard copy documents are not required.

3.8.2.2 Projects Using Section 01 45 06

When Section 01 45 06 SMALL PROJECT CONTRACTOR SITE PERSONNEL REQUIREMENTS (NAU) is part of this contract, the contractor shall prepare a report documenting the above items at least once per week for any week where any design or construction work occurs.

For all non-work periods of 7 days or longer, and during the Design phase of a Design-Build project where no construction is ongoing, the report shall be prepared at least once every two weeks.

The report shall be prepared in RMS-CM and submitted through that system. Hard copy documents are not required.

3.9 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer can issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

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SECTION 01 45 01

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM) (NAU)

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SECTION 01 45 01

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM) (NAU)
04/18

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual

1.2 MEASUREMENT AND PAYMENT

The work of this section is not measured for payment. The Contractor is responsible for the work of this section, without any direct compensation other than the payment received for contract items.

1.3 CONTRACT ADMINISTRATION

The Government will use the Resident Management System (RMS) to assist in its monitoring and administration of this contract. The Government accesses the system using the Government Mode of RMS (RMS GM) and the Contractor accesses the system using the Contractor Mode (RMS CM). The term RMS will be used in the remainder of this section for both RMS GM and RMS CM. The joint Government-Contractor use of RMS facilitates electronic exchange of information and overall management of the contract. The Contractor accesses RMS to record, maintain, input, track, and electronically share information with the Government throughout the contract period in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Closeout
Import/Export of Data

1.3.1 Correspondence and Electronic Communications

For ease and speed of communications, exchange correspondence and other documents in electronic format to the maximum extent feasible. Some correspondence, including pay requests and payrolls, are also to be provided in paper format with original signatures. Paper documents will govern, in the event of discrepancy with the electronic version.

1.3.2 Other Factors

Other portions of this document have a direct relationship to the reporting accomplished through RMS. Particular attention is directed to Contract

Clause, 52.236-15 "Schedules for Construction Contracts"; Contract Clause, 52.232-27 "Prompt Payment for Construction Contracts"; Contract Clause, 52.232-15 "Payments Under Fixed-Priced Construction Contracts"; Section 01 32 01 PROJECT SCHEDULE (NAU) or Section 01 32 16 SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES (NAU); Section 01 33 00 SUBMITTAL PROCEDURES; Section 01 35 26 SAFETY REQUIREMENTS; and Section 01 45 00 QUALITY CONTROL.

1.4 RMS SOFTWARE

RMS is a Windows-based program that can be run on a Windows-based PC meeting the requirements as specified in Paragraph: SYSTEM REQUIREMENTS. Download, install and be able to utilize the latest version of the RMS software within 7 calendar days of receipt of the Notice to Proceed. RMS software, user manuals, access and installation instructions, program updates and training information are available from the RMS website (http://rmsdocumentation.com). The Government and the Contractor will have different access authorities to the same contract database through RMS. The common database will be updated automatically each time a user finalizes an entry or change.

1.5 SYSTEM REQUIREMENTS

The following is the recommended system configuration to run the Contractor Mode RMS for full utilization of all features for all types and sizes of contracts. Smaller, less complicated, projects may not require the configuration levels described below. Required configuration also noted below.

Recommended RMS System Requirements	
Hardware	
Windows-based PC	1.7 GHz i3; AMD A6 3650 GHz or higher processor (REQUIRED)
RAM	8 GB
Hard drive disk	100 GB space for sole use by RMS system
Monitor	Screen resolution 1366 x 768
Mouse or other pointing device	
Windows compatible printer	Laser printer must have 4 MB+ of RAM
Connection to the Internet	minimum 4 Mbs per user
Software	
MS Windows	Windows 7 x 64 bit (RMS requires 64 bit O/S) or newer (REQUIRED)
Word Processing software	Viewer for MS Word 2013, MS Excel 2013 or newer (REQUIRED)
E-mail	MAPI compatible (REQUIRED)

Recommended RMS System Requirements	
Virus protection software	Regularly upgraded with all issued Manufacturer's updates and is able to detect most zero day viruses (REQUIRED)

1.6 CONTRACT DATABASE - GOVERNMENT

The Government will enter the basic contract award data in RMS prior to granting the Contractor access. The Government entries into RMS will generally be related to submittal reviews, correspondence status, and Quality Assurance(QA)comments, as well as other miscellaneous administrative information.

1.7 CONTRACT DATABASE - CONTRACTOR

Contractor entries into RMS establish, maintain, and update data throughout the duration of the contract. Contractor entries generally include prime and subcontractor information, daily reports, submittals, RFI's, schedule updates and payment requests. RMS includes the ability to import attachments and export reports in many of the modules, including submittals. The contractor responsibilities for entries in RMS typically include the following items:

1.7.1 Administration

1.7.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within 7 calendar days of receiving access to the contract in RMS. This includes, but is not limited to, Contractor's name, address, telephone numbers, management staff, and other required items.

1.7.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within 7 calendar days of receiving access to the contract in RMS or within 7 calendar days of the signing of the subcontractor agreement for agreements signed at a later date. This includes name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor is listed separately for each trade to be performed.

1.7.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office with "H". Letters are numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C" or "RFP".

1.7.1.4 Equipment

Enter and maintain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.7.1.5 Reports

Track the status of the project utilizing the reports available in RMS. The value of these reports is reflective of the quality of the data input. These reports include the Progress Payment Request worksheet, Quality Control (QC) comments, Submittal Register Status, and Three-Phase Control worksheets.

1.7.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response.

1.7.2 Finances

1.7.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule. The sum of pay activities equals the total contract amount, including modifications. Each pay activity must be assigned to a Contract Line Item Number (CLIN). The sum of the activities assigned to a CLIN equals the amount of each CLIN.

Unless approved in writing by the Contracting Officer, the Pay Activities shall be identical to those identified on the project schedule.

1.7.2.2 Payment Requests

Prepare all progress payment requests using RMS. Update the work completed under the contract at least monthly, measured as percent or as specific quantities. After the update, generate a payment request and prompt payment certification using RMS. Submit the signed prompt payment certification and payment request as well as supporting data either electronically or by hard copy. Unless waived by the Contracting Officer, a signed paper copy of the approved payment certification and request is also required and will govern in the event of discrepancy with the electronic version.

1.7.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Insure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments of same within 7 calendar days of Government acceptance of the CQC Plan.

1.7.3.1 Quality Control (QC) Reports

The Contractor's Quality Control (QC) Daily Report in RMS is the official report. The Contractor can use other supplemental formats to record QC data, but information from any supplemental formats are to be consolidated and entered into the RMS QC Daily Report. Any supplemental information may be entered into RMS as an attachment to the report. QC Daily Reports must be finalized and signed in RMS within 24 hours after the date covered by the report. Provide the Government a printed signed copy of the QC Daily

Report, unless waived by the Contracting Officer.

1.7.3.2 Deficiency Tracking.

Use the QC Daily Report Module to enter and track deficiencies. Deficiencies identified and entered into RMS by the Contractor or the Government will be sequentially numbered with a QC or QA prefix for tracking purposes. Enter each deficiency into RMS the same day that the deficiency is identified. Monitor, track and resolve all QC and QA entered deficiencies. A deficiency is not considered to be corrected until the Government indicates concurrence in RMS.

1.7.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS. Worksheets for the three-phase control meetings are generated within RMS.

1.7.3.4 Labor and Equipment Hours

Enter labor and equipment exposure hours on a daily basis. Roll up the labor and equipment exposure data into a monthly exposure report.

1.7.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS as a deficiency. The Contractor will monitor, track and show resolution for safety issues in the QC Daily Report area of the RMS QC Module. In addition, follow all reporting requirements for accidents and incidents as required in EM 385-1-1, Section 01 35 26 SAFETY REQUIREMENTS and as required by any other applicable Federal, State or local agencies.

1.7.3.6 Definable Features of Work

Enter each feature of work, as defined in the approved CQC Plan, into the RMS QC Module. A feature of work may be associated with a single or multiple pay activities, however a pay activity is only to be linked to a single feature of work.

1.7.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager.

1.7.4 Submittal Management

Enter all current submittal register data and information into RMS within 7 calendar days of receiving access to the contract in RMS. The information shown on the submittal register following the specification section 01 33 00 SUBMITTAL PROCEDURES will already be entered into the RMS database when access is granted. Group electronic submittal documents into transmittal packages to send to the Government, except very large electronic files, samples, spare parts, mock ups, color boards, or where hard copies are specifically required. Track transmittals and update the submittal register in RMS on a daily basis throughout the duration of the contract. Submit hard copies of all submittals unless waived by the Contracting Officer.

1.7.5 Schedule

Enter and update the contract project schedule in RMS by either manually entering all schedule data or by importing the Standard Data Exchange Format (SDEF) file, based on the requirements in Section 01 32 01 PROJECT SCHEDULE or 01 32 16 SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES. Refer to the contract documents for the section applicable to this contract.

1.7.6 Closeout

Closeout documents, processes and forms are managed and tracked in RMS by both the Contractor and the Government. Ensure that all closeout documents are entered, completed and documented within RMS.

1.8 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within the RMS system. RMS is an integral part of the Contractor's required management of quality control.

1.9 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within 7 calendar days after receipt of notice of RMS non-compliance by the Contracting Officer.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 45 05

CONTRACTOR SITE PERSONNEL REQUIREMENTS (NAU)

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SECTION 01 45 05

CONTRACTOR SITE PERSONNEL REQUIREMENTS (NAU)
02/19

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual

1.2 SUPERVISION

1.2.1 Duties

The Contractor shall designate a qualified superintendent or alternative to:

a. Provide adequate supervision of all workers.

b. Ensure complete and satisfactory performance of all work required in accordance with the terms of the contract.

c. Receive instructions from the Contracting Officer.

d. Manage and coordinate day-to-day production and schedule adherence.

e. Attend partnering and quality control meetings.

In this context the highest level manager responsible for the overall construction activities at the site, including quality and production is the superintendent.

1.2.2 Experience

Minimum 7 years construction experience including 5 years as a superintendent on projects similar in size, scope, and complexity.

1.2.3 Superintendent Qualification

The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification and safety compliance. The individual must be capable of interpreting a critical path schedule and construction drawings. The qualification requirements for the alternate superintendent are the same as for the project superintendent. The Contracting Officer may request proof of the superintendent's qualifications at any point in the project if the performance of the superintendent is in question.

1.2.4 Host Nation Requirements

The contractors superintendent must meet all training, education, and any other requirements established by the Host Nation authorities where work is performed. These requirements are in addition to, and do not relieve the contractor from any other requirement established by this contract.

1.3 QUALITY CONTROL PERSONNEL

1.3.1 Construction Quality Control (CQC) System Manager (SM)

Identify as CQC SM an individual that is responsible for overall management of construction quality control and has the authority to act in all CQC matters for the Contractor. The CQC SM reports to the Superintendent. Identify in the QC plan an alternate to serve in the event of the CQC SM's absence. The requirements for the alternate are the same as the CQC SM.

The CQC SM is required to be a graduate engineer, graduate architect, or a graduate of construction management, with a minimum of 5 years construction experience on projects similar in size and scope to this Contract. This experience shall be in the specialized field indicated below, if so indicated.

CQC SM Specialized Requirements	
Check if Req'd	Requirement
☐	Licensed Engineer or Architect in accordance with US or Host Nation Standards
☐	Architectural experience
☐	Civil (earthworks) experience
☐	Civil (pavements) experience
☐	Electrical experience
☐	Mechanical (HVAC) experience
☐	Structural experience
☐	

1.3.2 Specialized Personnel

Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization.

1.3.3 Additional CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, provide as part of the CQC organization specialized personnel to assist the CQC SM as identified in the table below. Only those personnel specifically identified with a check in column a. in the table below are required.

These individuals must report to the CQC SM and have the necessary education and/or experience in accordance with the experience matrix listed herein. If allowed other duties by column d., a single person can cover more than one area provided the person is qualified to perform quality control activities in each designated area.

Additional Quality Control Personnel			
a.	b.	c.	d.
Check if Req'd	Area / Discipline	Duties and Qualification	Allowed Other Duties**
☐	Civil	Graduate Civil Engineer with 5 yrs experience	☒
☐		Civil technician or Construction Manager with 5 years related experience	☒
☐	Mechanical	Graduate Mechanical Engineer with 5 yrs experience	☒
☐		Person with 5 years experience supervising mechanical features of work in the field with a construction company	☒
☐	Electrical	Graduate Electrical Engineer with 5 years experience	☒
☐		Person with 5 years of experience supervising electrical features of work in the field with a construction company	☒
☐	Structural	Graduate Civil Engineer (with Structural Track or Focus) with 5 years experience	☒
☐		Person with 5 years of experience supervising structural features of work in the field with a construction company	☒

Additional Quality Control Personnel			
a.	b.	c.	d.
Check if Req'd	Area / Discipline	Duties and Qualification	Allowed Other Duties**
☐	Architectural	Graduate Architect with 5 years experience	☒
☐	Environmental	Graduate Environmental Engineer with 5 years experience	☒
☐	Concrete, Pavements and Soils	Materials Technician with 5 years experience for the appropriate area	☒
☐	Testing, Adjusting & Balancing (TAB)	Experienced technician employed by a TAB agency that has a current certification from AABC, NEBB or TABB	☒
☐			☒
☐			☒
☐			☒
☐			☒

** If box is checked, other duties are allowed, if unchecked (blank) then no other duties are allowed.

1.4 SAFETY PERSONNEL

1.4.1 Site Safety and Health Officer (SSHO)

Provide a SSHO meeting the requirements of Section 01 35 26 SAFETY REQUIREMENTS (NAU).

When the SSHO is on leave or is otherwise not available while construction work is ongoing, an equally-qualified Alternate SSHO must be provided and must fulfill the same roles and responsibilities as the primary SSHO.

1.4.2 Members of QC Organization

The contractors Safety Personnel shall be members of the QC Organization. This does not change the requirement that they report directly to a senior project (or corporate) official.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PRESENCE ON SITE

3.1.1 Primary Personnel

When the block in the column "On Site at All Times" in the following table is marked, the following personnel shall be physically present at the project site at all times when work is being performed:

ON SITE PRIMARY PERSONNEL	
On Site at All Times	Position
☒	Superintendent or Alternate Superintendent
☒	CQC SM or Alternate CQC SM
☒	SSHO or Alternate SSHO

Refer to paragraph CONCURRENT DUTIES ON THE SAME PROJECT to determine if personnel identified above may have concurrent duties on this project.

3.1.2 Additional CQC Personnel

Additional CQC Personnel identified above shall be physically present at the construction site when work is being performed on their areas of responsibility.

3.2 CONCURRENT DUTIES ON THE SAME PROJECT

The contractors site personnel may have concurrent duties on a single project in accordance with the following table. Concurrent duties indicated apply to both primary and alternate personnel.

Any person proposed to perform concurrent duties must meet all qualifications, including education, training, and experience for all positions to which they are proposed to be assigned.

CONCURRENT DUTIES	
Allowed*	Description
☐	The CQC SM may serve as both Design QC SM and CQC SM (applicable to Design-Build Projects only)
☐	Design QC SM may have other Design responsibilities
☐	The CQC SM may also be assigned as Project Superintendent.
☐	The CQC SM may also be assigned as SSHO.
☐	The SSHO may also be assigned as Project Superintendent.

* If box is checked, the concurrent duty is allowed, if unchecked (blank) the concurrent duty is NOT allowed.

3.3 EMPLOYMENT BY PRIME CONTRACTOR

All personnel identified in this Specification Section shall be directly employed by the prime contractor except as noted in paragraph EMPLOYMENT BY OTHER THAN PRIME CONTRACTOR.

If the prime contractor is a Joint Venture, employees of the Joint Venture members are considered to meet this requirement.

Personnel may not "seconded" from another firm, regardless of their relationship to the prime contractor. Under no circumstances shall they be employed by or affiliated with any subcontractor or supplier on this contract.

To be considered a prime contractor employee, an individual shall be: (1) employed by the prime contractor, (2) directly paid by the prime contractor, and (3) be completely independent of and free from conflicts of interest with subcontractors the prime intends to use on the project. Personnel who have previously been employees of subsidiaries or related business units, or from firms to be employed as subcontractors on this project will not be considered to be sufficiently independent unless there has been a break of at least 12 months between the employees employment with these firms and this project.

Prior written approval from the Contracting Officer shall be obtained if the contractor proposes to use any personnel who are employed by a parent company or wholly owned subsidiary of the prime contractor.

Subsidiaries or related business units which are not wholly owned by the prime contractor are considered a subcontractor for the purposes of this section.

3.4 EMPLOYMENT BY OTHER THAN PRIME CONTRACTOR

Where indicated in the following table, personnel identified in this Specification Section may be employed by a First-Tier Subcontractor

provided all work is being performed by that first-tier subcontractor or their subcontractors.

Under no circumstances may one first-tier subcontractor be responsible for any quality control, safety, or supervision of another first-tier subcontractor.

PERSONNEL ALLOWED TO BE EMPLOYED BY FIRST TIER SUBCONTRACTOR	
Allowed only if Box is Checked	Position
☐	Alternate Superintendent
☐	Design QC SM (Design-Build projects)
☐	
☐	
☐	

-- End of Section --

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 45 10

DESIGN QUALITY CONTROL (NAU)

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SECTION 01 45 10

DESIGN QUALITY CONTROL (NAU)
3/18

PART 1 GENERAL

1.1 PURPOSE

This section establishes additional Quality Control requirements for the design activities associated with a Design-Build contract. It supplements and does not replace any of the requirements of Section 01 45 00 CONSTRUCTION QUALITY CONTROL.

1.2 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1110-1-12	(2006; Change 1) Engineering and Design -- Quality Management

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Design Quality Control (DQC) Plan; G, DO

SD-05 Design Data

Discipline-Specific Checklists

1.4 DESIGN QUALITY CONTROL (QC) PERSONNEL

Identify a Design QC System Manager (SM) an individual that is responsible for overall management of design quality control and has the authority to act in all Design QC matters for the Contractor. Also identify an alternate who will be able to perform these duties when the Design QC SM is

The Design QC SM is required to be licensed and registered in accordance with the requirements of the country where the construction work is performed.

The Design QC SM may be assigned other duties, and is a member of the Quality Control Organization as described in paragraph QUALITY CONTROL ORGANIZATION of Section 01 45 00 Construction Quality Control.

1.4.1 Training

The Design QC SM and any person designated to act as their alternate are required to have completed the Construction Quality Management (CQM) for Contractors course. This course is periodically offered by the the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

The Construction Quality Management Training certificate expires after 5 years. No one may be appointed or continue to serve in a position requiring this training if their certificate has expired. Retaking the course is required to obtain a new certificate.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

In addition to the requirements of paragraph GENERAL REQUIREMENTS of Section 01 45 00 CONSTRUCTION QUALITY CONTROL, the QC system shall include all design operations, both onsite and offsite, and be keyed to the proposed design and construction sequence.

3.2 DESIGN QUALITY CONTROL (DQC) PLAN

Design will be permitted to begin only after acceptance of the Design QC Plan.

3.2.1 Design Quality Control (DQC) Plan

At least 30 days prior to the planned start of design, submit a Design Quality Control (DQC) Plan. In addition to the procedures as identified in Paragraph CONTENT OF QUALITY CONTROL PLANS in Section 01 45 00 CONSTRUCTION QUALITY CONTROL, the following additional requirements apply to the Design Quality Control (DQC) plan:

a. Explain the procedures to be followed to ensure all services required by this contract are performed and provided in a manner that meets professional architectural and engineering quality standards. As a minimum, all documents must be technically reviewed by competent, independent reviewers identified in the DQC Plan. The same element that produced the product may not perform the independent technical review (ITR). Correct errors and deficiencies in the design documents prior to submitting them to the Government.

b. Include the discipline-specific checklists to be used during the design and quality control of each submittal. Submit at each design phase as part of the project documentation these completed discipline-specific checklists. ER 1110-1-12 provides some useful information in developing checklists.

c. A copy of the letter to the DQC SM signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the DQC SM, including authority to stop work which is not in compliance with the

Contract.

The Contracting Officer will notify the Contractor in writing of the acceptance of the DQC Plan. After acceptance, any changes proposed by the Contractor are subject to the acceptance of the Contracting Officer.

3.2.2 Acceptance of DQC Plan

Acceptance of the DQC Plan is required prior to the start of design. Acceptance is conditional and will be predicated on satisfactory performance.

The Government reserves the right to require the Contractor to make changes in the DQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the DQC Plan, notify the Contracting Officer in writing of any proposed change and provide a revised submittal of the applicable plan. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 INDEPENDENT TECHNICAL REVIEW

Prior to submission of any design submittal, the contractor shall ensure an Independent Technical Review (ITR) is performed and documented. ITR requirements are explained in Chapter 4 of ER 1110-1-12. This is considered an integral part of the design quality control requirements and the procedures shall be included in the DQC Plan. The Government will not perform an ITR of the contractors designs.

3.4 SUBMITTALS AND DELIVERABLES

3.4.1 Submittal Requirements

Design Submittals shall comply with the requirements in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization is responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

Organize the design documents in a manner that will assure ensure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. Designers of Record must thoroughly cross-check and coordinate all work until they are professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved.

3.4.2 ProjNet/DrChecks

The contractor shall provide design submittals through the ProjNet/DrChecks system (https://www.projnet.org) in addition to RMS-CM to allow for identification and tracking of review comments.

If an alternate means of tracking comments is authorized, it shall be documented in writing and the procedures included in the DQC Plan.

3.4.3 Government Review Comments

As part of the Government's review of the contractor prepared design, comments will be made by Government reviewers. These comments may include "recommendations" or "suggestions". Any comment regarding "recommendations" or "suggestions" shall not be considered a change to the contract. The comment is intended to improve the design and/or construction, but is not required to be incorporated.

3.4.4 Contractor Required Response

The Contractor must respond to all comments in no later than the next scheduled submittal. Responses must identify the specific action taken with citation of location (drawing number or specification paragraph) within the relevant document. Generalized statements of intention such as "will comply" or "will revise the specification" are not acceptable.

If the Contractor disagrees technically with any comment and does not intend to comply with the comment, the Contractor must clearly outline, with ample justification, the reasons for non-compliance within five (5) days after close of the review period in order that the comment can be resolved in a timely manner.

3.5 CHANGES INCORPORATED IN DESIGN

3.5.1 Changes Resulting from Review Comments

No review comment shall change the contract requirements. If the Contractor believes the action required by any comment exceeds the requirements of this contract, the Contractor must clearly annotate any review comments as being outside the contract requirements.

Additionally, the Contractor must notify the Contracting Officer in accordance with contract clause 52.243-4 Changes. The Contractor must explain why their original submittal complies with the contract. The Contractor must receive written notice from the Contracting Officer prior to the Contractor taking any further action in regards to the comment.

3.5.2 Changes by Contractor

Should the design include work which the contractor believes is not otherwise required by the contract, no additional payment or increase in performance time shall be granted for the design or construction of the work unless the work has previously been authorized in writing by the Contracting Officer and a modification issued or written direction received to proceed with the work.

Should the contractor fail to provide this notification and receive written direction from the Contracting Officer, any additional work that exceeds the contract requirements shall be considered a Betterment and shall be incorporated at no additional cost to the Government with no change in the performance period.

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 78 00

CLOSEOUT SUBMITTALS (NAU)

6/18

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SECTION 01 78 00

CLOSEOUT SUBMITTALS (NAU)
6/18

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

ERDC/ITL TR-12-1	(2015) A/E/C Graphics Standard, Release 2.0
ERDC/ITL TR-12-6	(2015) A/E/C CAD Standard - Release 6.0

U.S. DEPARTMENT OF DEFENSE (DOD)

UFC 1-300-08	(2009, with Change 2) Criteria for Transfer and Acceptance of DoD Real Property

1.2 DEFINITIONS

1.2.1 As-Built Drawings

As-built drawings are developed and maintained by the Contractor and depict actual conditions, including deviations from the Contract Documents. These deviations and additions may result from coordination required by, but not limited to: contract modifications; official responses to Contractor submitted Requests for Information; direction from the Contracting Officer; designs which are the responsibility of the Contractor, and differing site conditions. Maintain the as-builts throughout construction as red-lined PDF files. These files serve as the basis for the creation of the record drawings.

1.2.2 Record Drawings

The record drawings are the final compilation of actual conditions reflected in the as-built drawings.

1.3 SOURCE DRAWING FILES

If any source drawings exist, and the contractor desires to use them during this contract, they shall be requested at least 30 days prior to required use, unless they were provided prior to award.

1.3.1 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction drawings and data for the referenced project. Any other use or reuse shall be at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and waives to the fullest extent permitted by law, any claim or cause of action of any nature against

the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

Electronic CAD drawing files are not construction documents. Differences may exist between the CAD files and the corresponding contract documents. The Government makes no representation regarding the accuracy or completeness of the electronic CAD files, nor does it make representation to the compatibility of these files with the Contractor hardware or software. In the event that a conflict arises between the contract documents and Source drawing files, the contract documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction drawings and data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Warranty Management Plan
Warranty Tags
Spare Parts Data
Equipment Guarantees

SD-08 Manufacturer's Instructions

Posted Instructions

SD-11 Closeout Submittals

Local Warranty Contractor
As-Built Drawings; G
Record Drawings; G
Interim DD FORM 1354; G
Warranty Repair Report

1.5 SPARE PARTS DATA

a. Provide a complete list of all spare parts. Indicate manufacturer's name, part number, nomenclature, and stock level required for maintenance and repair. List those items that may be standard to the normal maintenance of the system.

b. Supply spare parts for items as identified elsewhere in the contract documents for spare parts inventory. Provision of spare parts does not relieve the Contractor of responsibilities listed under the contract guarantee provisions.

1.6 QUALITY CONTROL

Additions and corrections to the contract drawings must be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols must conform to ERDC/ITL TR-12-6.

1.7 WARRANTY MANAGEMENT

1.7.1 Warranty Period

The construction warranty period will begin on the date of project acceptance and continue for the full product warranty period.

Two joint warranty inspections will be conducted during the warranty period by the Contractor, Contracting Officer and the Customer Representative. These inspections will be conducted at approximately 1/3 and 2/3 of the warranty period.

1.7.2 Local Warranty Contractor

If the contractor will not have an ongoing presence within 50 kilometers of the project site during the entire warranty period, the contractor shall identify a company which is authorized to initiate and pursue construction warranty work action on behalf of the Contractor. The contractor shall furnish the name, telephone number and address of any company so authorized.

This company must be licensed in accordance with Host Nation requirements and have a physical presence within 50 kilometers of the project site, shall be continuously available, have an English speaking representative, and be responsive to Government inquiry on warranty work action and status. This requirement does not relieve the Contractor of any of its responsibilities in connection with other portions of this provision.

The 50 kilometer range may be increased only upon specific written request of the contractor and is subject to the approval of the Contracting Officer.

1.7.3 Warranty Management Plan

Develop a warranty management plan and submit one electronic copy at least 30 days before the pre-final inspection. Include within the warranty management plan all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan must be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. The term "status" as indicated below must include due date and whether item has been submitted or was accomplished. Assemble approved information in a binder and turn over to the Government upon acceptance of the work. Include within the warranty management plan the following:

a. Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors,

manufacturers or suppliers involved.

b. Furnish with each warranty the name, address, and telephone number of each of the guarantor's representatives nearest to the project location.

c. Listing and status of delivery of all Certificates of Warranty for extended warranty items, to include roofs, HVAC balancing, pumps, motors, transformers, and for all commissioned systems such as fire protection and alarm systems, sprinkler systems, lightning protection systems, etc.

d. A list for each warranted equipment, item, feature of construction or system indicating:

(1) Name of item.
(2) Model and serial numbers.
(3) Location where installed.
(4) Name and phone numbers of manufacturers or suppliers.
(5) Names, addresses and telephone numbers of sources of spare parts.
(6) Warranties and terms of warranty. Include one-year overall warranty of construction, including the starting date of warranty of construction. Items which have extended warranties must be indicated with separate warranty expiration dates.
(7) Cross-reference to warranty certificates as applicable.
(8) Starting point and duration of warranty period.
(9) Summary of maintenance procedures required to continue the warranty in force.
(10) Cross-reference to specific pertinent Operation and Maintenance manuals.
(11) Organization, names and phone numbers of persons to call for warranty service.
(12) Typical response time and repair time expected for various warranted equipment.

e. The plans for attendance at the post-construction warranty inspections conducted by the Government.

f. Procedure and status of tagging of all equipment covered by extended warranties.

g. Copies of Posted Instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.

1.7.4 Pre-Warranty Conference

Prior to submitting the Warranty Management Plan, and at a time designated by the Contracting Officer, meet with the Contracting Officer to develop a mutual understanding with respect to the requirements of this section. Communication procedures for Contractor notification of construction warranty defects, priorities with respect to the type of defect, reasonable time required for Contractor response, and other details deemed necessary by the Contracting Officer for the execution of the construction warranty will be established/reviewed at this meeting.

1.7.5 Contractor's Response to Construction Warranty Service Requirements

Following oral or written notification by the Contracting Officer, respond to construction warranty service requirements in accordance with the

"Construction Warranty Service Priority List" and the three categories of priorities listed below. This list includes items which may not be applicable to a specific project. An edited list of the applicable items shall be included in the Warranty Management Plan, but no changes in the priority code shall be made without specific written direction of the Contracting Officer.

Submit a Warranty Repair Report on any warranty item that has been repaired during the warranty period. Include within the report the cause of the problem, date reported, corrective action taken, and when the repair was completed.

If the Contractor does not perform the construction warranty within the timeframe specified, the Government will perform the work and either deduct the costs from any remaining contract funds or recoup expenses from the contractors bonding company or the Bank Letter of Guaranty.

a. First Priority Code 1. Perform onsite inspection to evaluate situation, and determine course of action within 4 hours, initiate work within 6 hours and work continuously to completion or relief.

b. Second Priority Code 2. Perform onsite inspection to evaluate situation, and determine course of action within 8 hours, initiate work within 24 hours and work continuously to completion or relief.

c. Third Priority Code 3. All other work to be initiated within 3 work days and work continuously to completion or relief.

d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Life Safety Systems
(1) Fire suppression systems.
(2) Fire alarm system(s) in place in the building.

Code 1-Air Conditioning Systems
(1) Recreational support.
(2) Air conditioning leak in part of building, if causing damage.
(3) Air conditioning system not cooling properly.

Code 1-Doors
(1) Overhead doors not operational, causing a security, fire, or safety problem.
(2) Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors
(1) Overhead doors not operational.
(2) Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical
(1) Power failure (entire area or any building operational after 1600 hours).
(2) Security lights
(3) Smoke detectors

Code 2-Electrical
(1) Power failure (no power to a room or part of building).
(2) Receptacle and lights (in a room or part of building).

Code 3-Electrical
Street lights.

Code 1-Gas
(1) Leaks and breaks.
(2) No gas to family housing unit or cantonment area.

Code 1-Heat
(1) Area power failure affecting heat.
(2) Heater in unit not working.

Code 2-Kitchen Equipment
(1) Dishwasher not operating properly.
(2) All other equipment hampering preparation of a meal.

Code 1-Plumbing
(1) Hot water heater failure.
(2) Leaking water supply pipes.

Code 2-Plumbing
(1) Flush valves not operating properly.
(2) Fixture drain, supply line to commode, or any water pipe leaking.
(3) Commode leaking at base.

Code 3 -Plumbing
Leaky faucets.

Code 3-Interior
(1) Floors damaged.
(2) Paint chipping or peeling.
(3) Casework.

Code 1-Roof Leaks
Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks
Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)
No water to facility.

Code 2-Water (Hot)
No hot water in portion of building listed.

Code 3-All other work not listed above.

1.7.6 Warranty Tags

At the time of installation, tag each warranted item with a durable, oil and water resistant tag approved by the Contracting Officer. Attach each tag with a copper wire and spray with a silicone waterproof coating. Also, submit one electronic (PDF) record copies of the warranty tags showing the layout and design. The date of acceptance and the QC signature must remain blank until the project is accepted for beneficial occupancy. Show the following information on the tag in both English and the Host Nation language.

Type of product/material	
Model number	
Serial number	
Contract number	
Warranty period from/to	
Inspector's signature	
Construction Contractor	
Address	
Telephone number	
Warranty contact	
Address	
Telephone number	
Warranty response time priority code	
WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.	

1.8 EQUIPMENT GUARANTEES

When a completed facility is transferred to the User and the facility has equipment installed which is covered by a guarantee, the Contractor shall furnish to the Government the Equipment Guarantees containing the following information:

a. Contract number and a list of all items of equipment, properly identified, that are covered by a guarantee period under the terms and conditions of the contract, including make and model numbers.

b. A copy of all manufacturer's or vendor's guarantee documents.

c. The dates during which the Contractor's guarantee is in effect under the identified individual section and paragraph of the contract specifications for each item of equipment on the list (indicating for each item the date of acceptance for the beginning of the guarantee period, either for beneficial use or final acceptance, whichever is earlier, and the expiration date of the guarantee period).

d. Name of an authorized representative of the Contractor with complete address and telephone number; and the names, addresses and telephone

numbers of all subcontractors and/or equipment suppliers or manufacturers specifically designated in writing by the Contractor for direct contact by the COR for implementing the guarantee after transfer of the equipment.

PART 2 PRODUCTS

(Not applicable)

PART 3 EXECUTION

3.1 AS-BUILT DRAWINGS

Keep working as-built markup drawings current on a weekly basis.

3.1.1 Drawing Standards

As-built drawings shall be maintained according to the appropriate local standard (e.g. installation or using agency). If no standard exists, they shall be maintained according to ERDC/ITL TR-12-1 and ERDC/ITL TR-12-6.

3.1.2 Drawing Content

As-built drawings (CAD, and PDF) shall be revised and updated continuously during construction to show the as-built conditions during the progression of the project.

a. Changes from the contract plans which are made in the work or additional information discovered or provided in the course of construction shall be accurately and neatly recorded as changes or additions to the original contract drawings.

b. If the contract includes options, only option(s) awarded for construction shall be shown on the as-built drawings.

c. Shop drawings containing as-built information shall be incorporated into the working as-built drawings. This additional information may be added to an existing working as-built drawing or may require the addition of a new drawing to the working as-built drawing set.

3.1.3 Submission Requirements

During construction, submit the working as-built markup drawings for approval prior to submission of each monthly pay estimate. For failure to maintain the working and final record drawings as specified herein, the Contracting Officer will withhold 10 percent of the monthly progress payment until approval of updated drawings in addition to any other amounts withheld for other reasons.

3.2 RECORD DRAWINGS

The Record Drawings shall be the final record of construction as installed and completed by the Contractor and as indicated on the as-built drawings. All changes, variations and/or required additions to the contract drawings shall be included.

3.2.1 Initial Submission

Submit the final record PDF and CAD drawings package for the entire project

no later than 30 calendar days after the Final Inspection for each facility or contractual completion milestone for an individual phase or project. The Contracting Officer will review final record drawings for accuracy and return them to the Contractor for required corrections, changes, additions, and deletions within 90 calendar days.

The submission shall consist of the following:

a. One copy of PDF drawings in electronic format, formatted for ANSI Size D.

b. One copy of CAD drawings in electronic format.

3.2.2 Final Submission

After receipt of the Contracting Officers comments, the contractor shall revise the record drawings in accordance with any comments received and submit the final Record Drawings within 30 calendar days.

The submission shall consist of the following:

a. Two copies of PDF drawings in electronic format, formatted for ANSI Size D, on separate media.

b. Two copies of CAD drawing including all reference files in electronic format on separate media.

3.2.3 Subsequent Revisions

In the event the Contractor accomplishes additional work which changes the as-built conditions of the facility after submission of the final Record Drawings, the Contractor shall furnish revised and additional drawings as required to depict as-built conditions. The requirements for these additional drawings will be the same as for the Record Drawings included in the original submission.

3.3 CLEANUP

Leave premises "broom clean." Clean interior and exterior glass surfaces exposed to view; remove temporary labels, stains and foreign substances; polish transparent and glossy surfaces; vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition. Replace filters of operating equipment. Clean debris from roofs, gutters, downspouts and drainage systems. Sweep paved areas and rake clean landscaped areas. Remove waste and surplus materials, rubbish and construction facilities from the site..

3.4 REAL PROPERTY RECORD

Near the completion of Project, but a minimum of 90 days prior to the Final Inspection for each separate facility or project, complete and submit an accounting of all installed property with Interim DD FORM 1354. Contact the Contracting Officer for any project specific information necessary to complete the DD FORM 1354. Refer to UFC 1-300-08 for instruction on completing the DD FORM 1354.

-- End of Section --

The use of signs to identify Corps managed or supervised design, construction, and rehabilitation projects - both for military and civil works - is an important part of efforts to keep the public informed of Corps work. For this purpose, a construction project sign package has been adopted. This package consists of two signs: one for project identification and the other to show on-the-job safety performance of the contractor.

These two signs are to be displayed side by side and mounted for reading by passing viewers. Exact placement location will be designated by the contracting officer's representative.

The panel sizes and graphic formats have been standardized for visual consistency throughout all Corps operations.

Panels are fabricated using HDO plywood or aluminum with dimensional lumber uprights and bracing. The sign faces are nonreflective vinyl.

All legends are to be die-cut or computer-cut in the sizes and typefaces specified and applied to the white panel background following the graphic formats shown on pages 16-2 and 16-3. The Communication Red panel on the left side of the construction project sign with Corps Signature (reverse version) is screen-printed onto the white background.

A display of these two signs is shown on the following two pages. Mounting and fabrication details are provided on page 16-4.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Below are two samples of the Construction Project Identification sign showing how this panel is adaptable for use to identify either military (top) or civil works projects (bottom). The graphic format for this 4'x 6' sign panel follows the legend guidelines and layout as specified below. The large 4'x 4' section of the panel on the right is to be white with black legend. The 2'x 4' section of the sign on the left with the full Corps Signature (reverse version) is to be screen-printed Communication Red on the white background The designation of a sponsor in the area indicated is optional with Military or Civil Works construction signs. Signs may list one sponsoring entity. If agreement on a sponsor designation cannot be achieved, the area should be left blank.

This sign is to be placed with the Safety Performance sign shown on the following page. Mounting and fabrication details are provided on page 16-4.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: One- to two-line description of Corps relationship to project.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

Legend Group 2: Division or District Name (optional). Placed below 10.5" reverse Signature (6" Castle).
Color: White
Typeface: 1.25" Helvetica Regular

Legend Group 2a: One- to three-line identification of Military or Civil Works sponsor (optional). Place below Corps Signature to cross-align with Group 5a-b.
Color: White
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

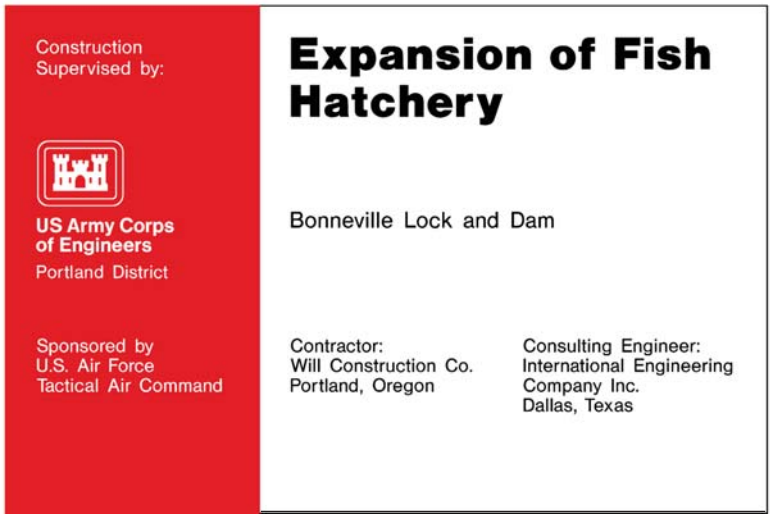
Legend Group 3: One- to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Cross-align the first line of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Groups 5a-b: One- to five-line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.
Color: Black
Typeface: 1.25" Helvetica Regular
Maximum line length: 21"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	various	4'x6'	4"x4"	HDO-3	48"	WH-RD/BK

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the Construction Project Identification sign specified on page 16-2.

The graphic format, color, size and typefaces used on the sign are to be reproduced exactly as specified below. The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend groups 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown.

Safety record numbers are mounted on individual metal plates and are screw-mounted to the background to allow for daily revisions to posted safety performance record.

Special applications or situations not covered in these guidelines should be referred to the district Sign Program Manager.

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with 8" (outside diameter) Safety Green first aid logo.
Color: To match Pantone system 347
Typeface: 3" Helvetica Bold
Color: Black

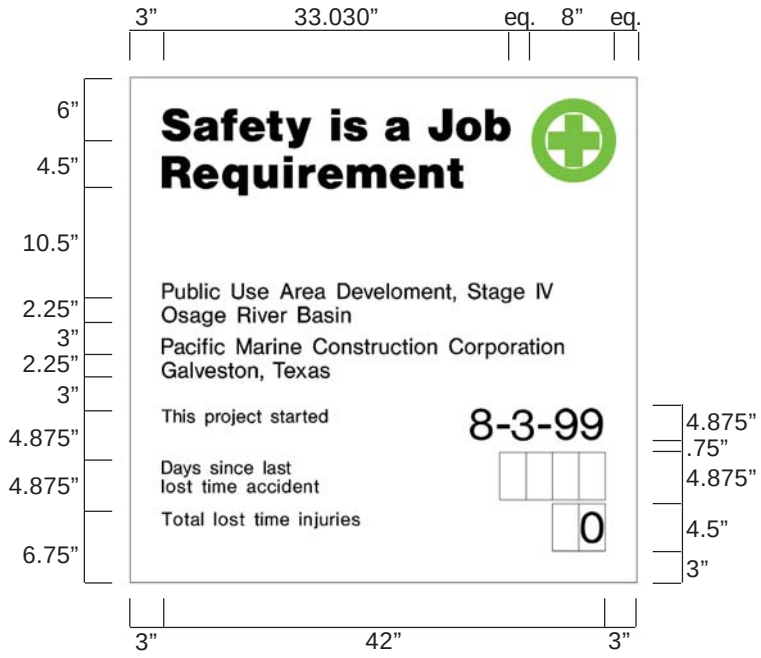
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

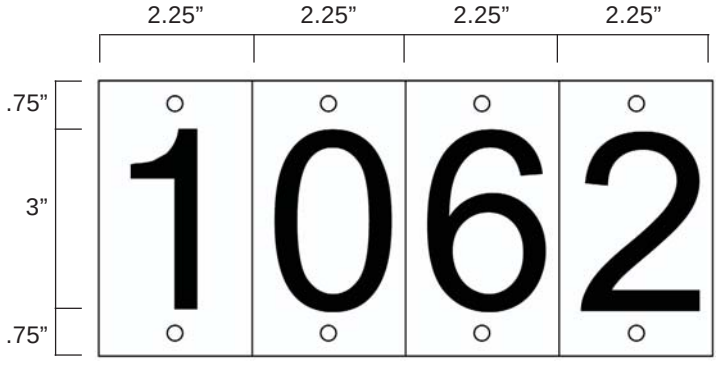
Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060 aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5" x 4.5"

All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards as specified in Appendix D.



Sign Type	Legend Size (A)	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4'x4'	4"x4"	HDO-3	48"	WH/BK-SG



All Construction Project Identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer representative and shall conform to the size, format, and typographic standards shown on pages16-2 and 16-3. Detailed specifications for HDO plywood panel preparation are provided in Appendix B.

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.

For additional information on the proper method to prepare sign panel graphics, contact the district Sign Program Manager.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

Sign graphics to be prepared on a white nonreflective vinyl film with positionable adhesive backing.

All graphics except for the Communication Red background with Corps Signature on the project sign are to be die-cut or computer-cut nonreflective vinyl, prespaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on pages 16-2 and 16-3.

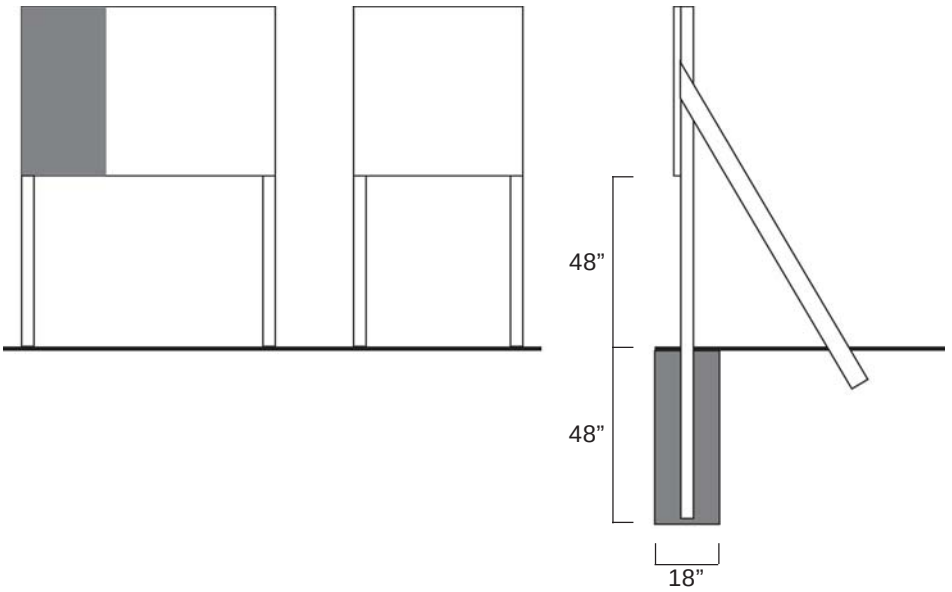
The 2'x 4' Communication Red panel (to match Pantone system 032) with full Corps Signature (reverse version) is to be screen-printed on the white background. Identification of the district or division may be applied under the signature with white cut vinyl letters prepared to Corps standards.

Drill and insert six (6) .375" T-nuts from the front face of the HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

Apply graphic panel to prepared HDO plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4" x 4" treated Douglas Fir or Southern Yellow Pine, No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4" x .375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2" x 4" struts on inside face of uprights to reinforce installation as shown.



Construction Project Identification Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 2a: Military/Civil Works Sponsor

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign
Legend Group 2: Project Title

1. _____
2. _____

Legend Group 3: Contractor/A&E

1. _____
2. _____