TECHNICAL SPECIFICATIONS
FA4626-26-C-XXXX

Repair Launch Facility Concrete

NZAS 22-6000

February 2025

341st CIVIL ENGINEER SQUADRON
MALMSTROM AIR FORCE BASE
GREAT FALLS, MONTANA

TABLE OF CONTENTS

DIVISION 01 – GENERAL REQUIREMENTS

01 00 00 GENERAL REQUIREMENTS

01 10 00 SITE SECURITY

01 22 00 MEASUREMENT AND PAYMENT

01 36 00 ENVIRONMENTAL PROTECTION

DIVISION 03 – CONCRETE

03 01 00 CONCRETE REPAIR

APPENDIX A – CONCRETE CONDITION EXAMPLES

END TABLE OF CONTENTS

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01 00 00 - GENERAL REQUIREMENTS (MISSILE COMPLEX)

PART 1 GENERAL

1.1 SUMMARY OF WORK FOR PROJECT NZAS 22-6000, Repair Launch Facility Concrete. This work will be performed at one or more Launch Facilities (LF). Work consists of concrete joint, crack, and de-laminated/damaged repair. The contractor shall provide all plant, labor, equipment, supervision, services, and materials to execute and satisfy the requirements of this Contract.

1.2 BRAND NAME PRODUCTS

Whenever brand names of products are listed throughout this Specification it shall be implied that the brand specified or approved equal may be used, unless the item is required to be hardness tested, in which case the items will need to have passed AFNWC hardness testing, and the exact item specified shall be installed.

1.3 RECYCLING INITIATIVE

The Contractor shall provide recycled products specified in Section 013600 and the Specification requirements in this Section. If conflicts exist between the product specified in this Section and the recycled product, the Contractor shall provide a recycled product that most nearly matches the salient features of the specified product.

1.4 WINTER SUSPENSION

The Contractor should plan for approximately 165 calendar days of suspension, typically, from 1 November though 15 April. If conditions permit, site work may continue upon mutual agreement of the parties. No additional delay costs due to weather will be approved during the winter suspension.

1.5 CODE CHANGE

Code Changes may periodically take place in the missile field. When Code Changes take place, no work shall occur at any 341 Missile Wing Launch Facility; this occurs typically for a 1-week period in each squadron throughout a 3 month duration. A minimum two-week notice will be given before this occurs.

1.6 PERFORMANCE PERIOD

After the notice to proceed, this project is allotted 7 calendar days per site/LF for completion. The overall performance period shall be determined with each issued task order.

1.7 SITE PROGRESSION

The Contractor must complete all work at a site before proceeding to the next site.

1.8 SITE VISITS

It shall be the responsibility of each Offeror to visit the work site to determine the nature, extent, and pertinent details of the Contract. The drawings attached to the specifications show

the general arrangement and approximate dimensions at the site. The successful Offerors shall be responsible for determining number of items, dimensions and details required for the proper accomplishment of the work as covered in the solicitation.

1.9 QUANTITIES AND LOCATIONS

Offerors must satisfy themselves by personal examination of the quantities and locations of the proposed Work.

1.10 LUMP SUM PRICES ON CONTRACTS

Where lump sum prices are required, the lump sum price shall include all work required to complete each item listed as lump sum in the Proposal Schedule.

1.11 CODES AND STANDARDS

Refer to drawings for codes and standards date that project was designed. Work shall meet the requirements of the plans and specifications and shall not be less than the minimum requirements of applicable sections of the latest Codes and Standards of following organizations (Not All Inclusive - See Each Division):

ACI American Concrete Institute
AWWA American Water Works Association
ASTM American Society for Testing and Materials
AASHTO American Association of State Highway and Transportation Officials
NFPA National Fire Protection Association

1.12 SAFETY AND QUALITY CONTROL PLAN

1.12.1 The Contractor shall comply with all existing Occupational Safety and Health Act (OSHA) standards of safety at all times in the performance of this Contract. Hazards to the safe use of the premises due to the Contractor's work and/or equipment shall be suitably marked at all times. Pedestrian and vehicle traffic ways shall be kept clear and unobstructed.

1.12.2 The Contractor shall submit with the Quality Control Plan, the name of the designated on-site safety persons responsible for ensuring that all safety and accident prevention provisions of this Specification are implemented and enforced. The Contractor shall ensure his personnel receive safety training and briefings and that all safety inspections, practices, and procedures are within compliance. The name of the designated on-site safety persons, safety training, briefings, inspections, practices and procedures shall be included in the Quality Control Plan.

1.12.3 The Contractor shall indoctrinate each employee to ensure clear understanding of the following subject areas, but not limited to:

The purpose of the accident prevention program (i.e., to minimize hazards and prevent injuries).

A review of the hazards inherent in the work environment and the precautions to be taken.

Location of first aid and other emergency facilities.

A detailed description of what to do in case of injury, fire, or identification of a safety hazard.

Review of cleanup procedures.

Required safety equipment including earplugs, goggles, face guards, respirators, protective clothing, hard-hats, etc. (when and how to use).

Location of company safety rules (posting or handout).

Identification of the Contractor employees responsible for safety/accident prevention.

1.12.4 In addition to normal safety practices, the Contractor shall comply with the following requirements:

The safety of Contractor personnel on-site is the Contractor's responsibility.

All personnel shall receive an initial Air Force safety briefing, prior to site entry, and will comply with all requirements set forth in that briefing.

All personnel shall comply with Air Force on-site safety procedures and additional procedures as directed by the Contracting Officer or his designated representative when the Contractor's safety person is not immediately available.

The Contractor shall ensure that safety barriers/portable ladders, ladder extensions, or environmental covers are properly installed at access hatches and excavations.

Equipment shall be placed so as not to impede normal traffic in and out of the work area, nor to interfere with emergency exit from work area and off-site.

Extreme caution must be exercised to preclude personal contact with energized electrical circuits. Contractor shall comply with NFPA 70 and 72E for electrical safety.

Hard-hats shall be worn in accordance with OSHA requirements and hard-toed safety shoes shall be worn by all personnel at all times on the work site. Other safety items such as ear protection, respirators and safety glasses, which are required by OSHA and/or the manufacturer of products for specific hazards, shall be available and used as necessary.

All heavy equipment shall be equipped with backup alarm in accordance with OSHA regulations.

All vehicles shall be in safe operating condition. Vehicles and equipment not in compliance with OSHA requirements shall not be allowed on site.

1.12.5 A number of hazards inherent to the work environment must be recognized. They include, but are not limited to:

Electrical circuits and devices pose serious and generally continuing hazards. Contractor shall comply with NFPA 70 and 72E for electrical safety. The Contractor shall take every precaution to prevent personnel injury. Ground Fault Interrupters (GFIs) shall be in-line on all temporary electrical circuits and installed near the supply.

Mechanical devices can pose serious hazards when operated. Appropriate precautions shall be taken.

1.12.6 First aid and medical requirements are as follows:

The Contractor shall comply with accident response requirements. These requirements are provided in a safety briefing by base personnel at the pre-construction conference. The Contractor shall keep these requirements on file at the working site for inspection by Air Force personnel.

The Contractor shall maintain an emergency first aid kit at the work site in accordance with requirements.

The Contracting Officer or his designated representative will assist in coordinating emergency medical, ambulance, or airlift requirements.

1.12.7 All accidents (employee injuries and vehicle, building, or equipment property damage, etc.), regardless of severity, shall be reported promptly to the Contracting Officer or his designated representative.

1.13 SECURITY AND ENTRY

1.13.1 Site security and entry shall follow the procedures in Section 01 10 00 of these Specifications.

1.13.2 The Contracting Officer or his designated representative reserves the right to deny access to the site to any Contractor personnel who does not conform to security and safety regulations. If access is denied for safety or security violations, it shall be done at no additional cost to the Government.

1.14 SUBMITTALS

Submit the following according to the Contract and as required elsewhere in this Specification:

Quality Control Plan
As-Built Field Data (Red Lined Drawings)
Work Clearance Request (AF IMT 103)
Hot Work Permit (AF Form 592)
Overall Work Schedule by task and date (Gantt Chart)
Weekly Construction Work Schedule

PART 2 PRODUCTS

NOT APPLICABLE

PART 3 EXECUTION

3.1 PRE-PERFORMANCE MEETING

There shall be a pre-performance meeting between the Government and the Contractor a minimum of five (5) working days prior to commencement of work under this Contract (Notice to Proceed).

3.2 INSPECTION

The Contractor shall schedule with the Inspector during normal work hours the times for inspecting items such as "Concealed Work" or other times for escort duties. The inspector will be the spokesman for compliance with the specifications and drawings. The Contracting Officer will resolve controversies between the inspector and the Contractor.

3.3 SUBMITTAL SCHEDULE

The Government will provide the Submittal Schedule with "REQUIRED SUBMISSION DATE " dates filled in for each line number. The Contractor shall submit all required items by

the timeline established on the schedule. This completed form will be used by the Government for tracking submittal progress.

3.4 SUBMITTALS

3.4.1 Submittals shall be recorded on AF Form 3000, shall have the Submittal ID No., Specification paragraph number and description of material as labeled on Submittal Schedule. Revised Submittals shall have the same Submission Number followed by a dash with the revision number. The Contractor shall submit to the Contracting Officer for review and approval the following information: Manufacturer's product brochures and catalog data for all equipment, components and materials to be installed under the terms of this Contract. All material Submittals shall be original vendor information (not copies) and include location on Drawings and/or Specifications with cross referencing information to Drawing schedules and Specifications, dimensional, assembly, and sub-assembly Drawings, parts lists, and other data required to completely describe each item. Include the Drawing schedule letter, symbol, or plan mark on the Submittal. Where more than one product is listed in a document, the item submitted shall be properly identified by circles, arrows, or a description with cross-references. Four (4) copies of each physical Submittal are required; however, electronic submission is also acceptable when provided in a clearly legible and organized format.

3.4.2 **Circle or arrow all descriptive literature** to accomplish identification of specific components/items which are proposed to be furnished. Government will not react to descriptive material/literature, which has not been circled or arrowed, except to reject the Submittal. Highlighting does not appear on subsequent copies and therefore is unacceptable.

3.5 PERMITS

3.5.1 The Contractor shall be responsible for securing all permits as may be necessary for the completion of all work required by this project. Construction delays caused by lack of permits will be at no cost to the Government.

3.5.2 A Hot Work Permit (AF Form 592) is required to be submitted and approved before any hot work operations (cutting, grinding, welding, open flame, etc.). The approved permit shall be on site and followed during hot work operations.

3.5.3 A Work Clearance Request (AF Form 103) is required prior to the start of any work on site.

3.6 WORK SCHEDULE

3.6.1 The Contractor shall have a tentative schedule for construction at the pre-performance meeting. The location of the site under construction at any time during the construction process shall be coordinated with the Government prior to the start of work. This coordinated schedule shall change if it is in the best interest of the Government at no additional cost to the Government. Delays due to weather, to include inability of Government Inspector to travel to the site because of Roadmaster-declared hazardous road conditions, shall result in no cost to the Government.

3.6.2 The Contractor shall provide an overall project/task order schedule of work by task and date of operation as Gantt chart or like product. This schedule shall be submitted 30 days prior to the start of work.

3.6.3 The Contractor shall provide a weekly schedule of work by task and date of operation. This schedule will be used to coordinate other USAF support agencies to facilitate the contractor meeting project deadlines. See paragraph 3.8 Start of Work Notification.

3.7 WORK TIMES

The work schedule will generally be from or 6:45 am – 5:15 pm Monday through Thursday. Work will only be conducted Monday through Thursday, and no work will be conducted on Federal Holidays. The Contractor must provide at least a 2 week notice prior to work schedule changes. Reference Section 01 10 00 of this Specification for more detailed requirements regarding entrance, exit, security and work requirements for missile sites.

3.8 START OF WORK NOTIFICATION

The Contractor shall provide a two week project lookahead to the Missile Engineering Scheduler (731-7195) and Project Inspector not later than 9:00 am on EVERY Tuesday of the week prior to the scheduled workweek. This shall include, but is not limited to, a daily schedule of work to be completed at the site, when the initial construction work shall begin, notifying when work shall resume after a work stoppage of more than three workdays. The Contractor shall be aware that the Notice to Proceed is not sufficient notification when initial work shall begin.

3.9 WASTE, PROCESSING AND STORAGE SITES

Processing and storage sites shall be only those areas described at the pre-construction meeting. Location of stockpiled materials will be coordinated with security and testing personnel and approved by the Contracting Officer. Upon Project completion, the site shall be restored to original condition (equal to that before Project start) to include all finish grading, leveling, shaping, contouring, and seeding. All waste shall be disposed of at a properly licensed disposal facility, unless otherwise approved.

3.10 UTILITIES

3.10.1 No utilities will be available to the Contractor. The Contractor shall provide any necessary portable power and water.

3.10.2 Restroom facilities are not available for Contractor use at launch facilities. The Contractor will be required to supply portable toilet facilities when working at launch facilities.

3.11 UTILITY OUTAGES

All utilities programmed to be interrupted during construction shall be scheduled at least 10 days in advance of the outage and at a time convenient for the government. No interruptions shall be made until the Contracting Officer approves the outage.

3.12 MAINTENANCE OF AIR FORCE OPERATIONS AND CONTINUED USE

Scheduling of work at each site is of paramount importance. Every effort should be made to coordinate the work schedule with Malmstrom maintenance and support personnel in order to ensure a minimal disruption of operational activities. Proper coordination will help ensure that Contractor work at each facility will continue with minimal interruption due to Air Force maintenance activities.

3.13 QUALITY CONTROL

3.13.1 General: THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL. THIS IS CONSIDERED BY THE GOVERNMENT TO BE A MAJOR INSPECTION ITEM OF THIS CONTRACT. In addition to CONTRACT CLAUSE, INSPECTION OF CONSTRUCTION, the Contractor shall comply with the Quality Control Provisions as specified herein. The Contractor shall perform all Quality Control inspection and/or testing required by this contract unless specifically designated to be performed by the Government. The Quality Control system must consist of personnel, plans, procedures, and organization necessary to provide materials, equipment, workmanship, fabrication, construction, and operations that comply with Contract requirements. The system shall cover construction operations, including fabrication both on-site and off-site, and shall be keyed to the proposed construction sequence. If the Contractor fails to submit an acceptable Quality Control Plan, The Contracting Officer will refuse to allow construction to start.

3.13.2 Quality Control Plan

3.12.2.1 The Contractor shall submit the Quality Control Plan within ten (10) working days after Notice to Proceed (NTP) and no less than 30 days Prior to Start of Work (PTSW). The Contractor's Quality Plan shall identify the personnel, procedures, instructions, records, forms; and, as a minimum, shall include the following:

3.13.2.2 Include the names: Quality Control Manager, work supervisor, on-site safety person, the number, classifications, qualifications, duties, responsibilities, and authorities of personnel. A copy of a letter, signed by an authorized official of the firm, which describes the responsibilities and delegates the authorities of the Quality Control Manager, shall be furnished.

3.13.2.3 The Quality Control Manager shall work directly for the company president or owner and must have a minimum of five years of experience as Quality Control Manager or Inspector. Work supervisor and on-site safety person shall have five years' experience performing these types of duties. Include qualifications in the submitted plan for Government approval.

3.13.2.4 A job-specific, work-item checklist will be developed by the Contractor for inspection purposes. The list will be broken into Sections identical to the Contract Specifications and will contain all inspection actions necessary to ensure full compliance with the Contract. These inspections shall be annotated on the Quality Control Records.

3.13.2.5 Provide documentation format for Contractor's Quality Control activities and testing. The Sample of Quality Control Record form is to be used for documenting daily inspections, corrective actions, tests, etc. A Sample Quality Control Record from a simplified and generic project is attached to indicate the level of detail expected.

3.13.2.6 Ensure a complete set of Contract Specifications, Modifications, full size Drawings and all other pertinent information are on site during construction.

3.13.2.7 The process for addressing varying site conditions, managing work at remote sites, and working with security requirements is part of this Plan.

3.13.2.8 Site security, entry and exit procedures are to be addressed.

3.13.2.9 Methods to ensure scheduled appointments are met and documentation to verify arrival and departure times at the work site.

3.13.2.10 Safety program that ensures complete compliance with OSHA and all Safety requirements. The name of the designated on-site safety persons and safety training, briefings, inspections, practices and procedures shall be included in the Quality Control Plan.

3.13.2.11 A Submittal Schedule program that ensures a completed Submittal Schedule is followed.

3.13.2.12 Testing (Systems Checklist attached) program that ensures a completed system checklist and all test results are submitted and ensures the following:

3.13.2.12.1 All tests shall be scheduled with the Contracting Officer for Government inspection and verification. The Contractor shall supply laboratory and field tests per the Systems Checklist.

3.13.2.12.2 One copy of all test results shall be supplied by the Contractor to the Contracting Officer. Test results shall be submitted within 72 hours after completion of tests with daily Quality Control Record. One copy shall be included with completed systems checklist.

3.13.2.12.3 An independent testing laboratory shall be hired by the Contractor for all of the Contractor supplied tests.

3.13.2.12.4 See specific technical Specifications Sections for detailed testing requirements.

3.13.3 This Contract requires a Quality Control Manager. The individual assigned shall be responsible for this Project. Duties shall include, but are not limited to the following:

3.13.3.1 The Quality Control Manager shall be responsible for ensuring all requirements of the Specifications, Drawings, and Quality Control Plan is met.

3.13.3.2 Environmental Compliance and all permits are Quality Control Managers responsibilities.

3.13.3.3 Quality Control testing procedures, including corrective actions to be taken where non-compliance is noted, is the responsibility of the Quality Control Manager.

3.13.3.4 The Contractor's Quality Control activities to be performed at the site include those of subcontractors, off-site fabricators, and suppliers.

3.13.3.5 The Quality Control Manager shall work with the Government inspector to take any necessary photos.

3.13.4 Acceptance: The Quality Control Plan will be reviewed and accepted by the Contracting Officer. The Contractor shall make such changes and additions necessary for clarity and completeness as requested by the Contracting Officer. Acceptance is conditional and the Government reserves the right to require the Contractor to make changes in the Quality Control Plan, personnel, and operations to correct deficiencies found by the Government during performance of work. No change shall be implemented prior to acceptance in writing by the Contracting Officer. Non-compliance with the Quality Control Plan will result in one or more of the following actions at the Government's discretion:

3.13.4.1 Directed removal and replacement of the QC Manager.

3.13.4.2. Reduced progress payments until corrections are made.

3.13.4.3 Cure notices, other applicable contracting actions up to, and including possible contract termination for default.

3.13.4.4 Other contractual actions deemed appropriate by the Contracting Officer.

3.13.5 Quality Control Records: The Quality Control Records shall contain a record of daily inspections for each site with all work accomplished. Specific items of work checked each day will be annotated. All work-in-place must be certified as complying with the Contract plans and Specifications. Non-compliance items must be clearly noted. Corrective actions must be outlined and detailed for non-compliance items. The Contractor shall maintain daily records, which will be on-the-job site and available for review by the Contracting Officer or his technical representative. Daily reports will be signed by the designated Quality Control Manager and will indicate hours spent on Quality Control at the site for that day. A copy of the QC daily reports shall be given to the Project Inspector.

3.14 SUPERVISION

3.14.1 There shall be one on-site supervisor at the site during all work. Submit names and resumes with a minimum of 5 years of supervisory experience with Quality Control Plan.

3.14.2 Each on-site supervisor will be responsible for all Contractor and subcontractor workers, and adherence to the Specifications and Drawings.

3.15 SPECIFICATIONS, MODIFICATIONS, AND DRAWINGS

A complete set of Contract Specifications, all modifications, and full-size Contract Drawings shall be on site. Other information such as Submittals, etc., shall also be present.

3.16 OPERATING AND MAINTENANCE INSTRUCTIONS

3.16.1. Operating and Maintenance Instructions shall be on AF Form 3000 per Submittal Schedule. Provide complete sets of instructions (O&M Manuals), for all equipment and materials including architectural, civil, mechanical and electrical, as applicable to the Contracting Officer.

3.16.2 One complete Operating and Maintenance Instruction set shall be furnished ten working days before the final inspection as an inspection aid.

3.16.3. Four complete Operating and Maintenance Instruction sets shall be submitted twenty working days after final inspection acceptance.

3.16.4. These O&M Manuals shall include as a minimum: all material, equipment and associated existing equipment cross referenced to Contract Specifications and Drawing Schedules, existing and new electrical wiring and interfaces, mechanical interfaces, troubleshooting guides, parts lists, parts manuals, operating and maintenance instructions. Include all equipment and material, parts manual information required to order (purchase) replacement, install, maintain, and repair items that were installed.

3.16.5. All AS-BUILT FIELD DATA, red line drawings shall reflect the exact installation performed and submitted to the Contracting Officer for review and approval a minimum of three calendar days prior to the date of final inspection. The color red shall be used to indicate all additions and green to indicate all deletions. The Contractor shall submit 1-11x17 set per site.

3.16.6. Each manual shall be in a three-ring binder (large enough to easily turn pages without binding) with a rigid and durable cover. Where information or instructions are included for more than one model or part, the Contractor shall clearly identify and mark the model and parts with circles, arrows, and a description with cross references of equipment and material installed on the job. Large-size drawings or diagrams shall be folded and placed in heavy weight sheets with pockets. See each Division for additional requirements.

3.16.7. The manuals shall be sectionalized using dividers with labeled tabs identifying the product/item behind the dividers. Include all Shop Drawings with the product/item. All drawings and schematics shall include ALL new and existing items with interface connections, and all details associated with the installation. The first Section shall include a table of contents with the equipment list, all guarantee information, extra material list as described in Paragraph Contractor Furnished Equipment List. Each individual product/item shall be labeled per Equipment List with Specification Section and drawing schedule nomenclature and location.

3.16.8. Include all tests along with the completed System Checklist with each manual.

3.16.9. Include all Safety Data Sheets (SDS) of all materials left on the site.

3.16.10. Furnishing operating and maintenance instructions do not relieve the Contractor of the responsibility of furnishing framed instructions and schematics FOR NEW AND EXISTING where specified.

3.16.11. Each binder shall be indelibly marked on the exterior front and edge with the Project name, Project number, Contract number, name of Contractor, and date.

3.17 CONTRACTOR FURNISHED EQUIPMENT LIST

3.17.1. The Contractor Furnished Equipment Lists, Guarantees (warrantees) and extra materials list for each site shall be provided with the Operating and Maintenance Instructions. The Contractor shall submit the following data:

3.17.1.1. Equipment List: An itemized equipment list showing retail value and nameplate data including, but not limited to, serial number, model number, size, manufacturer, installed location, cross reference to Specification Section, drawing schedules nomenclature, and all other pertinent information, for all Contractor furnished items installed under this Contract. This list shall be filled out for each item installed.

3.17.1.2. Guarantees (Warrantees): Provide a list of all equipment and material items, which are specified to be guaranteed, accompanied by a copy of each specified guarantee filled out as required by the manufacturer. Each specific guaranteed item on the list shall include the name, address, and telephone numbers of the subcontractor who installed the item, the supplier or distributor, and the manufacturer. The start and expiration dates of the guarantee period shall be included. The completion data of the guarantee period shall correspond to the applicable Specification requirements for each guarantee item.

3.17.1.3. Extra Materials: Provide extra materials list. Deliver an extra material list and extra materials to Government Inspector prior to final inspection. Extra materials shall consist of material identified in the specific Specification Section. An itemized material list showing retail value including, but not limited to, manufacturer, installed location, cross reference to Specification Section, drawing schedules nomenclature, and all other pertinent information, for all material items furnished in this Contract.

3.18 ROAD CLOSURES

Contractor shall maintain access to and from site at all times for AF vehicles.

3.19 CONTRACTOR VEHICLES, EQUIPMENT AND MATERIALS

3.19.1 The Contractor shall provide all vehicles and equipment necessary to accomplish the Contract work. Power equipment shall be equipped with safety and noise limiting devices. The equipment shall be in a safe and efficient operating condition.

3.19.2 All vehicles shall be maintained in a safe operating condition in accordance with OSHA standards. All vehicles and equipment that are not essential to the job will be left off site at the end of workday. See Section 01 10 00-Site Security for additional requirements.

3.19.3 The Contractor will NOT be permitted to store necessary materials and vehicles on site. Material must be placed in a designated area per Waste, Processing, and Storage Site paragraph and will not interfere with site access. The Government shall not be responsible for the loss of contractor material, tools, or equipment.

3.19.4 The Contractor is hereby informed that the access road leading from the main road adjacent to each site is under military control. The area off to the sides of the access road is private property and, in some cases, county or state property. The parking of vehicles on the access road or adjacent property is strictly prohibited unless written permission has been obtained from the Contracting Officer or property owners by the Contractor.

3.19.5 At the end of each workweek, the Contractor shall clean up the work area debris, ensure the security of equipment, tools and work/contract materials.

3.20 CONCEALED WORK

All items of work to be concealed shall be Government inspected prior to concealment. All Government inspection items shall be scheduled and performed during normal working hours.

3.21 CONSTRUCTION AREA

The Contractor shall confine construction operations as much as feasible. Complete restoration of the area to existing conditions shall be the responsibility of the Contractor and shall be at the Contractor's expense.

3.22 CONSTRUCTION NEAR UTILITY SYSTEMS

3.22.1 All contractors shall be responsible for processing their own Work Clearance Request (AF Form 103) and coordinating with Government inspector as required. The Contractor is responsible for obtaining all coordination signatures for the permit. This permit shall be completed and valid prior to start of any construction work. TO THE MAXIMUM EXTENT POSSIBLE, ELIMINATE PERMANENT MARKINGS ON PAVEMENT AND CURBS. Location marks shall be removed after 14 calendar days. All markings shall be accomplished with water-based chalk (Aervoe Pacific Inc. 1-800-227-0196 or equal). No paints will be used. Detailed permit procedures and guidelines shall be provided to the Contractor during the Pre-Performance Conference. Digging within three feet of buried utilities, to include communications cables, environmental monitoring wells, electrical cables, irrigation systems, and gas lines shall be performed by soft digging until the utility is exposed. The Project Inspector shall be notified three days prior to digging within a three-foot area near this utility. A representative from communications (Telco) must be present during excavation of Communications Cables. The cable/piping routes must be marked prior to excavation in the area. The Contractor shall be held responsible for any damage to a marked or identified utility by excavation procedures. Once the utility is exposed, mechanical excavation may be used if there is no chance of damage occurring to the cable or piping system. The Contractor is responsible for all utility locates needed for the accomplishment of the work.

3.22.2 Reburial of Exposed Utilities: When existing utility lines are reburied, a tape, detectable by pipe detector systems, shall be installed above the uncovered length of the utility at a depth of 12 inches above utility. Tape shall be a minimum five mil plastic tape with metallic tracer, minimum three inches wide, lettering on tape to show buried utility, and brightly colored.

3.22.3 USAF As-built drawings are available and accessible for review by contacting Missile Engineering at 731-7532. As-built drawings will assist in locating utility lines and underground structures. The Contractor shall be held responsible for any damage to the utility by excavation procedures. The Contracting Officer and Project Inspector shall be immediately notified of any damage.

3.23 PROTECTION OF EXISTING FACILITIES

The Contractor shall be responsible for the protection of features outside the construction limits and within the construction limits such as existing structures, fences, roads, paving, curbs, sidewalks, utility appurtenances, and equipment. Provide temporary heating as required. The repair or replacement of such items damaged during construction will be at the Contractor's expense.

3.24 CONSTRUCTION STAKING

The Contractor shall provide construction staking.

3.25 NUCLEAR DENSOMETERS

3.25.1 Where nuclear densometers or other devices containing radioactive elements are used on the Project, the Contractor must submit the following for each device to be used:

1. Serial number of all nuclear densometers to be used on AF property,
2. Copy of the corresponding US Nuclear Regulatory Commission (NRC) license,
3. Agreement State License and NRC Form 241 (for "Agreement State" firms),
4. Proof of a Nuclear Regulatory Committee (NRC) permit for its use and
5. Contractor site-specific health and safety plan (HASP).

3.25.2 The Contractor must also keep all radioactive equipment locked up when not in use and remove it from the work site at completion of the workday.

3.26 NOTICE OF FINAL INSPECTION AND ACCEPTANCE

3.26.1 A final inspection will be held after completion of work at the site. This inspection must be coordinated with the Contracting Officer and Government Inspector and should include at a minimum these personnel plus the Project Engineer from Missile Engineering. Subsequent final inspections at each site can be accomplished by the Contracting Officer, or his designated representative, including the Government Inspector. Final payment SHALL NOT occur until all discrepancies are corrected, final acceptance, and all environmental permits are received.

3.26.2 Warranty Work: The Contractor shall correct any deficiencies identified during the warranty period within a reasonably acceptable timeframe as determined by the Contracting Officer. Upon notification of a warranty issue, the Contractor shall promptly coordinate with the Government Representative to schedule and complete the corrective work.

3.27 CONTRACT PROGRESS SCHEDULE AND REPORT

Contractor shall complete Progress Schedule Form 3064 and Progress Report Form 3065 monthly starting at the Notice to Proceed until Final Acceptance. The Forms will be delivered to the Contracting Officer on, or prior to the 1st of each month.

END OF SECTION 01 00 00

QUALITY CONTROL REPORT TO INSPECTOR

Date: _____

CONTRACT NO. F24626-26-C-XXXX	**TITLE AND LOCATION**	**REPORT NO.**

CONTRACTOR (Prime or Subcontractor)	**NAME OF SUPERINTENDENT OR QC REP**
WEATHER	**TEMPERATURE**
WEATHER EFFECTS	

PRIME CONTRACTORS/SUBCONTRACTOR WORKFORCE
(If space provide below is inadequate, use additional sheets

NUMBER	TRADE	HOURS	EMPLOYER	ACTIVITY/TASK PERFORMED	COMP	NON COMP

TOTAL WORK HOURS ON JOB SITE THIS DATE_ _____	-	KTR INITIALS CERTIFY INSPECTION OF ACTIVITY INITIALS
CUMULATIVE TOTAL OF WORK HOURS FROM PREVIOUS REPORT _____	-	WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? ☐ ☐ YES ☐ ☐ NO
TOTAL WORK HOURS FROM START OF CONSTRUCTION		IF YES, A COPY OF THE COMPLETED OSHA REPORT IS REQUIRED

CONSTRUCTION AND PLANT EQUIPMENT LEFT ON JOB SITE UNTIL USE IS COMPLETED

DESCRIPTION	DATE FIRST ON JOB (FIRST TIME ONLY)	HOURS WORKED THIS DATE	HOURS IDLED	DATE OF FINAL REMOVAL FROM JOB SITE

CONSTRUCTION AND PLANT EQUIPMENT NOT LEFT ON JOB SITE PERMANENTLY
(This will include pickup trucks and mobile mounted items, such as compressor, that are also used for transportation to and from the job)

DESCRIPTION	HOURS WORKED	HOURS IDLED

CEC FL-11 (3/97)

Attachment 1

SPEC PARA AND/OR DRAWING NO.	LOCATION AND DESCRIPTION OF DEFICIENCIES (Materials, Equipment, Safety, and/or Workmanship) ACTION TAKEN OR TO BE TAKEN

DEFICIENCIES CORRECTED THIS DATE	REFERENCE REPORT NO.	REFERENCE COMPLIANCE NOTICE NO.

INSPECTION AND/OR TESTING PERFORMED TODAY-FOLLOW WITH	LOCATION AND/OR ELEMENT	REMARKS RESULTS OF INSPECTION/TESTING

SPEC PARA/ DRAWING	EQUIPMENT/MATERIAL RECEVIED TODAY TO BE INCORPORATED IN JOB (Description, Sizes, Quantity)	SUBMITTAL NO. OR CERTIFICATION	DATE APPROVED

REMARKS:
(Document Total QC Hours for this Day, Directions Received from Government, and Compliance Notices, Etc)

Quality Control Rep Date

CONSTRUCTION REPRESENTATIVES REMARKS AND/OR EXCEPTIONS TO THIS REPORT

Construction Representative Date

SECTION 01 10 00 – SITE SECURITY

PART 1 GENERAL

1.1 Ensure all contract personnel protect all government property, equipment and follow established fire marshal and security directives while in Air Force restricted areas.

1.1.1 Anti-Terrorism (AT) Awareness Training: In accordance with DoDI 2000.1v1 AFI 10-245, Anti-terrorism (AT) Program Implementation, ensure Level 1 – AT Awareness Training is completed by all contractors within 30 days of requiring access, and annually thereafter. The training will be provided by the Government. The objective of the training is to provide personnel with requisite knowledge necessary to remain vigilant and enable employment of AT tactics, techniques, and procedures.

1.1.2 Force Protection: Contractor personnel are required to abide by all real-world Force Protection Condition (FPCON) measures, random anti-terrorism measures (RAMs), shelter-in-place orders, evacuations and lock-down notices as directed. Examples include mandatory badge and ID checks, facility single points-of-entry and searches of hand carried items.

1.2 Upon entering and exiting a restricted area, all individuals, hand-carried items and vehicles will be subject to inspection for readily detectable contraband items IAW the 341 MW Integrated Defense Plan, 31-1. It is the responsibility of the vehicle and/or equipment operator to present items and vehicles to be searched to include ensuring exterior bins and compartments are accessible.

1.3 Only authorized personnel are allowed to take photographs on site. IAW 18 United States Code § 795, it is expressly prohibited to capture any photograph, video, sketch, picture, drawing, map, or graphical representation of any DoW resources, facilities, or personnel conducting official business without obtaining explicit permission from the installation commander

1.4 Submit the Contractor Entry Authorization List (CEAL) according to the Contract and as required elsewhere in the Specifications.

1.5 MISSILE FIELD ENTRY AUTHORITY LIST (EAL)

1.5.1 The Contractor will be issued a request for a Contractor Entry Authority List (CEAL) by the Contract Administrator. Upon receipt, compile the information required for the CEAL and submit a completed CEAL to the Contract Administrator. Until this occurs, no employees will be permitted to enter Malmstrom AFB, missile field restricted areas, Missile Alert Facilities (MAF), Launch Facilities (LF), or free zones. Required CEAL information consists of the following: full name, date of birth, driver's license number, social security number, height, weight, eye color, hair color, home residence and company. All contractors listed on the CEAL will be put into the Criminal Justice Information Network (CJIN) database for a background check in accordance with United States Air Force directives. Reasons for unfavorable results from the background check will be marked UNF and lined through and result in individuals being denied access to Malmstrom AFB, MAFs, LFs, and free zones. Unfavorable results are listed in AFI 31-113 and include, but are not limited to, individuals that are determined to fall into one or more of the following categories: those having outstanding wants and warrants, sex offenders, violent offenders, drug

possession with intent to sell, drug distribution, those who are on probation, and those who are in a pre-release program. The definition of sex offender and violent offender can be found at Montana Code Annotated § 46-23-502. Security Forces (SF) is allotted five days to complete these checks. If an employee on a CEAL terminates his or her employment or is involved in an incident resulting in an unfavorable result, including, but not limited to those identified above, the Contractor shall immediately notify the Contracting Officer in writing.

1.5.2 Identify which personnel on the CEAL need to enter restricted areas. List all contractor personnel, to include sub-contractor personnel on the CEAL for entry to restricted areas. The CEAL will be used for entry into the MAFs and LFs even if a free zone has been issued. Keep the number of personnel to a reasonable number in order to accomplish the required project. The Contracting Officer may deny any CEAL requests with excessive numbers of workers. The contractor must submit a current State Driver's License and requested EAL information to the Contracting Officer at least thirty (30) days prior to work/requiring access. All changes, additions, and/or deletions must be sent to the Contracting Officer in writing.

1.5.3 All vehicles to be brought onto an LF must be listed on the EAL. Submit vehicle Make, Model and VIN to be put on the EAL.

1.6 SITE ENTRY/EXIT

1.6.1 Missile Launch Facility (LF)

1.6.1.1 Site Entry:

1.6.1.1.1 In order to gain entry inside the security fence of a Missile Launch Facility (LF), Contractor personnel must be listed on an authorized EAL, as submitted to the Contracting Officer, identified by inspector/escort personnel, and physically escorted on-site by the inspector/escort official. Each Government Escort is only allowed to escort six personnel at one time. If the Contractor plans to have more than six personnel on-site at one time the Contractor needs to notify the Missile Engineering Scheduler (731-7191) not later than 9:00 A.M. on Tuesday of the week prior to the scheduled workweek.

1.6.1.1.2 Government personnel will brief control methods and actions taken to enforce control in and around secure areas. Contract personnel may be removed from secure areas if classified material or information is present. Follow up briefings will be given to all personnel throughout the contract period.

1.6.1.1.3 All Contractor personnel shall be restricted to the area within the site and to those USAF controlled areas outside the site fence as designated by the Government inspector/escort. All activities of the Contractor personnel, while on site, shall be conducted in strict compliance with all site security. Notify the inspector/escort official prior to departing a site.

1.6.1.1.4 Upon arrival at the LF site, park on the access road at least fifty feet (50') from the site security gate, remain in the vehicle and wait arrival of the inspector/escort.

1.6.1.1.5 Upon arrival, the inspector/escort, will identify all Contractor personnel. Present to the inspector/escort, the government/State issued ID card that matches the EAL for all personnel entering the site.

1.6.1.1.6 Processing onto the LF will require approximately thirty (30) minutes and will not be considered delay time (see paragraph 1.9 GOVERNMENT DELAYS).

1.6.1.1.7 Contractor personnel can be subject to personal search upon entrance to the site.

1.6.1.1.8 All vehicles to be brought onto an LF must be listed on the EAL. Submit vehicle Make, Model and VIN to be put on the EAL. Commercial or company vehicles will be allowed access to the site provided the vehicle has a company logo, is licensed to the company (not to an individual) and listed on the EAL. Rental equipment will be allowed access to the site provided the rental companies emblems are permanently attached to the sides of the equipment. The Government inspector/escort will specify the parking location of the vehicles and equipment. Vehicles used exclusively for personnel transportation will not be permitted on site but may be parked off the fenced site.

1.6.1.1.9 Vehicles may be searched upon entering and leaving the LF. Contractor vehicles and equipment will be searched by Air Force personnel. Exterior bins and compartments shall be accessible for inspection. Primary emphasis of the searches will be placed on locating explosive devices, unusual objects, intruders, and other objects of suspicious nature.

1.6.1.1.10 No personal or company cellular phones will be permitted on-site at any time. Government personnel will be equipped with government issued cellular phones that may be used in case of emergencies. The contractor will exit the facility to use their cellular phones.

1.6.1.2 Site Exit:

1.6.1.2.1 Notify the inspector/escort official prior to departing the site. At this time, personnel and vehicles may be searched.

1.6.1.2.2 Processing off site will take up to thirty (30) minutes and shall not be considered delay time.

1.6.1.2.3 All contractors are to be off-site by 5:15 pm each workday. The project superintendent shall plan accordingly to have the project at an acceptable stopping point and clean-up performed prior to processing off-site by 5:15 pm each workday.

1.7 SECURITY

1.7.1 The Contractor shall protect all government property and comply with all Air Force physical security regulations and procedures, per this contract and as briefed at the pre-construction conference.

1.7.2 The Contractor and Government inspector on-site will be responsible for on-site security. The Contractor shall be responsible for Contractor personnel, equipment, and the accuracy and completeness of EAL data.

1.7.3 All Contractor personnel will be restricted to the project construction area within the site and to those USAF controlled areas outside the site fence, designated by the Government Inspector. All activities of the Contractor personnel, while on site, shall be conducted in strict compliance with all site security.

1.7.4 During all on-site work it is Contractor personnel responsibility to remain in visible contact with the inspector/escort. Failure to remain within the area being monitored will be a serious breach of security and safety regulations. Take any and all actions necessary to ensure compliance. The Government Inspector reserves the right to deny entry to any Contractor personnel who refuse to conform to security and/or safety regulations. Delays resulting from such entry denial shall not result in any cost to the Government.

1.8 WORK AREA RESTRICTIONS DURING AIR FORCE INSPECTIONS, EXERCISES, AND INVESTIGATIONS

Contractor personnel may be required to leave the area(s) or stop working and relocate within the area during Air Force inspections and exercises. For certain Air Force actions, contractor personnel will be prohibited from entering specified areas. If personnel are already in these area(s), they may be allowed to relocate or may be required to exit the area(s) entirely. These actions can be expected to occur two (2) times for periods up to 1 hour per occurrence during the contract period. During certain actual exercises and investigations, contractor and sub-contractor personnel will be under increased surveillance although they are not working near the area affected. If the contractor personnel are not involved in the investigation, these personnel may continue with their work.

1.9 GOVERNMENT DELAYS

1.9.1 If the Contracting Officer determines that the contractor incurred a work stoppage or security delay and the stoppage or delay was caused by the government, the contractor will be paid for lost progress at the rate in the proposal schedule. The inspector/escort official and contractor will determine government delays at the time of the government delay. Delays that result due to weather, government inspections, exercises, or real-world emergencies shall not constitute security delays.

1.9.2 Thirty (30) minute time allowance occurs within the work schedule times designated in 01 00 00 3.7 WORK TIMES (i.e., 6:45 to 7:15 or 4:45 to 5:15). All delay times will be paid as a Crew-hour (Cr-Hr) regardless of the number of Contractor's employees on-site.

1.9.3 Should work at a site be completed and the Contractor mobilizes to another site during working hours, the time it takes the inspector/escort to process off the completed site (thirty (30) minutes), drive to the next site following the Air Force designated primary route at the prescribed driving speeds (25MPH on gravel and as posted all others), and process onto the next site (thirty (30) minutes), shall not be considered delay time. All delay times will be paid as a Crew-hour (Cr-Hr) regardless of the number of Contractor's employees on-site. All entry and exit times will be submitted weekly to the Contracting Officer. These entry and exit times will be used to calculate the weekly security delays to the nearest one-quarter hour.

END OF SECTION 01 10 00

SECTION 01 22 00 - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and contract documents, including general and supplementary conditions, apply to this section.

1.2 DESCRIPTION OF WORK

A. The initial task order includes work at the Echo, November, and Oscar missile launch facility flights (30 sites).

B. Additional sites will be identified in subsequent task orders.

C. This section defines the basis of measurement and payment for the contract line-item numbers (CLINs) included in the Proposal Schedule.

1.3 GENERAL REQUIREMENTS:

A. Payment for each CLIN constitutes full compensation for all labor, materials, equipment, supervision, quality control, safety, and incidental work necessary to compete the item.

B. Work required to complete a CLIN, whether or not specifically referenced, is incidental to that CLIN and will not be paid separately.

C. Units of measure stated herein govern all payment calculations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 CLIN 0001AA – MOBILIZATION (EA per Site)

A. Measurement:
   1. Mobilization is measured as Each (EA) per site.
   2. One unit is earned upon completion of all mobilization activities for that site.

B. Payment:
   1. Payment includes all costs associated with project initiation and site readiness, including contract administration and overhead, insurance permits, fees, and licenses, safety compliance, submittals, shop drawings, and samples, utility locates, mobilization of labor, equipment, and tools.
   2. No separate payment will be made for incidental activities.

3.2 CLIN 0002AB – BONDING (LOT per Delivery Order)

A. Measurement:
1. Bonding is measured as a Lump Sum (LOT) per Delivery Order.

B. Payment:
1. Payment included the actual cost of required performance and payment bonds.
2. Profit and overhead shall not be applied to this CLIN.
3. Reimbursement shall be based on documented cost in accordance with contract requirements.

3.3 CLIN 0003AC – GOVERNMENT DELAYS (CR-HR)

A. Measurement:
1. Government Delays are measured by Crew-Hour (CR-HR).
2. Only hours during normal working periods are eligible.

B. Payment:
1. Payment applies only when the Contracting Officer determines that work stoppage or delayed start occurred, and the delay was caused solely by Government action.
2. Payment included verifiable labor and equipment time lost.
3. No payment will be made for evenings, Fridays, Saturdays, Sundays, Federal Holidays, or Winter Exclusion periods.

3.4 CLIN 0004AD – CRACK REPAIR (LF)

A. Measurement:
1. Crack Repair is measured by Linear Foot (LF) of crack repaired.
2. Prior to performing crack repair, the Contractor and Government Representative shall jointly verify and agree upon the locations and measured lengths to be repaired. Only mutually verified quantities will be eligible for payment.

B. Payment:
1. Payment includes all work required to complete crack repair, including removal of existing sealant (if present), routing and cleaning, installation of bond breaker tape, and installation of sealant in accordance with specifications.

3.5 CLIN 0005AE – JOINT REPAIR (LF)

A. Measurement:
1. Joint Repair is measured by Linear Foot (LF) of joint repaired.
2. Prior to performing joint repair, the Contractor and the Government Representative shall jointly verify and agree upon the locations and measured lengths to be repaired. Only mutually verified quantities will be eligible for payment.

B. Payment:
   1. Payment included all work required to complete joint repair, including removal of existing sealant (if present), routing, grinding, and cleaning, installation of bond breaker tape and backer rod, and installation of sealant in accordance to specifications.

3.6 CLIN 0006AF – SLAB REPAIR (SK)

A. Measurement:
   1. Slab Repair is measured by Sack (SK) of repair material placed.
   2. One sack equals 3.5 cubic feet of material.
   3. Before any slab repair work begins, the Contractor and the Governemnt Representative shall jointly inspect, measure, and agree upon the specific areas to be repaired. Only those areas mutually verified in the filed prior to repair will be eligible for payment.

B. Payment:
   1. Payment included all work required to complete slab repairs, including removal of loose or deteriorated concrete, surface preparation, forming, placement, and finishing of repair material.

END OF SECTION 01 22 00

SECTION 01 36 00

ENVIRONMENTAL PROTECTION

Table of Contents

1.0 References
2.0 Permits and Fees
3.0 Air Quality
4.0 Water Resources and Storm Water Discharge
5.0 Erosion, Sediment Controls, and Wetlands
6.0 Toxics
7.0 Emergency Planning and Community-Right-To-Know
8.0 Hazardous Materials
9.0 Storage of Hazardous Materials
10.0 Hazardous Waste
11.0 Solid Wastes
12.0 Spills and Spill Response
13.0 Discovery of Contaminated Soils, Military Munitions, and Historic, Archaeological or Cultural Resources
14.0 Construction Certifications - Public Water Supply and Wastewater Systems
15.0 Environmental Management System

Attachment 1-013600, Summary of Solid Waste Disposal and Diversion
Attachment 2-013600 - EESOH-MIS Hazardous Materials List

1.0 **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The Contractor shall conform to the Occupational Safety & Health Act, Environmental Protection Agency, Montana Department of Environmental Quality (MDEQ), U.S. Air Force and all other Federal, State and Local environmental regulatory requirements.

29 CFR	Occupational Safety and Health Administration
40 CFR	Environmental Protection Agency
49 CFR	Department of Transportation
EM 385-1-1	U.S. Army Corps of Engineers Safety and Health Requirements Manual (1996)
WETLANDS	U.S. Army Corps of Engineers Wetlands Delineation Manual

HWMP	Malmstrom Hazardous Waste Management Plan
ISWMP	Malmstrom Integrated Solid Waste Management Plan
SWMP	Malmstrom Storm Water Management Plan
AFMAN32-7002	Environmental Compliance and Pollution Prevention (4 February 2020

2.0 **PERMITS AND FEES**

2.1 No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. The contract price shall include all costs associated with this section. The Contractor shall pay all fines, fees, or other costs for violation or non-compliance with Federal, State, Regional and local laws and regulations.

2.2 The Contractor shall obtain and comply with all environmental permits and commitments required by Federal, State, regional, and local environmental laws and regulations unless otherwise stated.

2.3 Environmental Deliverables: The Contractor shall provide all applicable environmental permits, forms, plans, etc. to the Contract Officer (CO), Contract Officer Representative (COR), Quality Assurance Examiner (QAE), Project Manager, or other Government representatives. Deliverables shall include all required signatures.

Deliverables include (as applicable):

- construction dewatering permit (see §4.2.2)
- construction storm water notice of intent (see §4.2.2.A)
- construction storm water pollution prevention plan (see §4.2.2.B)
- construction storm water notice of termination (see §4.2.1.1.C)
- asbestos documents (see §6.1.3)

3.0 **AIR QUALITY**

3.1 Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

3.2 The Contractor shall not conduct open burning of waste material on Malmstrom Air Force Base or Missile Field property.

3.3 Particulates - The contractor shall not operate a construction site or demolition project unless reasonable precautions are taken to control particulate matter emissions. Airborne particulate matter emissions shall not exceed 20 % opacity as defined in Title 40 Code of Federal Regulations (CFR) Chapter 60 Appendix A. In general, this means that the contractor shall reduce or eliminate any visible dust plume or other visible emissions.

3.4 Sound Intrusions - The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

3.5 Ozone Depleting Substances (ODS) -The contractor shall ensure activities performed under this contract comply with Air Force Manual (AFMAN)32-7002, paragraphs 3.3.1.6, 3.3.5.1, 5.6.4.1.1, etc. The contractor shall not purchase, use, or specify the use of any Class I ODS in the production, design, or maintenance of the end item. Class II ODS may be used or specified only with the written approval of the Contracting Officer. For reference, 40 CFR 82 defines Class I and Class II ODS.

3.6 Heating, Ventilation, and Air-Conditioning (HVAC) Systems - The contractor shall comply with all refrigerant handling standards or regulations during HVAC maintenance, repair, replacement or demolition work. The contractor shall meet all applicable HVAC permitting, licensing, or other Federal, state, or local requirements.

Refrigerant technicians shall possess the necessary state and local certifications for HVAC repairs, refrigerant handling, or operating refrigerant reclamation or recycling equipment. Refrigerant technicians shall use only EPA-certified refrigerant recovery or reclamation equipment during HVAC work.

The contractor shall not intentionally vent or cause to be vented any chlorofluorocarbon (CFC) or hydro chlorofluorocarbon (HCFC) refrigerants during HVAC equipment repair, replacement, maintenance, or demolition. Replacement compressors and other replacement equipment used in repairing CFC-containing systems shall be compatible with CFC replacement refrigerants.

4.0 **WATER RESOURCES AND STORM WATER DISCHARGE**

4.1 General

4.1.1 The Contractor shall monitor construction activities to prevent surface water and ground water pollution. The Contractor shall not apply toxic or hazardous chemicals to soil or vegetation unless otherwise directed. The Contractor shall monitor all water areas affected by construction activities. For construction activities immediately adjacent to surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State- or Federally- issued Clean Water Act permits.

4.1.2 Municipal Separate Storm Sewer System (MS4) - The Contractor shall not discharge any contaminated materials into the MAFB MS4. The Contractor shall consult with CES/CEIE regarding discharges of any non-storm water effluent such as irrigation drainage, pavement wash-waters, uncontaminated ground water, etc. The contractor shall obtain MDEQ General Permit coverage for disinfected water discharges into the MS4 from hydrant testing, hydrostatic testing, water mains disinfection, disinfected potable water, or similar.

4.2 Storm Water

4.2.1 Construction Dewatering- The Contractor shall obtain coverage under the MDEQ General Permit for Construction Dewatering, MTG070000, prior to construction dewatering activities where necessary.

4.2.2 Construction Activities – The Contractor shall obtain coverage under the MDEQ General Permit for Storm Water Discharges Associated with Construction Activity, MTR10000 (Construction General Permit), prior to projects which will disturb 1 acre or more of land. This includes sub-phases of larger projects that will disturb 1 acre or more of land.

4.2.2.1 If a permit is required, the contractor shall submit a completed Notice of Intent (NOI) package to CES/CEIE for review prior to submitting to MDEQ. Allow 10 business days for CES/CEIE review. The package shall contain the following:

A. A Notice of Intent Form

B. A Storm Water Pollution Prevention Plan (SWPPP). This plan must meet the basic SWPPP requirements provided in the Construction General Permit. The SWPPP must also include:

- detailed site plan, including construction traffic control plans, in a format that can be maintained and updated throughout the project
- project activity timelines including excavation and landscaping schedules in a format that can be maintained and updated throughout the project
- initial descriptions and locations of construction storm water Best Management Practices (BMP) in a format that can be maintained and updated throughout the project

4.2.2.2 The contractor shall perform the following in accordance with the Construction General Permit:

A. The Contractor shall keep the SWPPP, associated plans and logbooks, and copies of the NOI and Construction General Permit on site.

B. Throughout the project, the Contractor shall perform inspections specified in the Construction General Permit, Part III. The Contractor shall record all SWPPP changes, modifications, and updates in logbooks or as notations on the documents.

C. When the contactor determines that the site has achieved final stabilization the contractor will prepare and submit a Notice of Termination (NOT) to 341 CES/CEIE for review prior to submittal to MDEQ. CES/CEIE will inspect the site and determine if final stabilization has been achieved. MAFB and the Construction General Permit define final stabilization as:

- the time at which all soil disturbing activities at the site are complete
- the Contractor has established vegetative cover with a density of at least 70 percent of pre-disturbed conditions

The Contractor shall not submit the NOT to MDEQ until CES/CEIE concurs that final stabilization was achieved.

D. Throughout the life of the project if the SWPPP Administrator, identified in the NOI, changes the Contractor shall notify CEIE through the CO or COR of that change. The Contractor shall provide a name, contact information, and a current State of Montana SWPPP Administrator Certification of the new Administrator.

4.2.2.3 The contractor should reference the MDEQ's website: https://deq.mt.gov for NOI Forms, instructions, SWPPP information, and other storm water requirements and guidelines.

4.2.3 Concrete Truck Washout and Masonry Cleanup - All concrete truck washout, masonry cleanup, and tool cleaning must occur off base or at a designated concrete washout containment area designated by the CO, COR, or QAE. The contractor will identify the area with visible signage. Contractor shall control and contain all concrete washout fluids and debris and remove them from the site prior to project completion.

4.3 Sanitary Sewer - The Contractor shall not discharge any restricted materials down the sanitary sewer or wastewater disposal system without Government approval. All discharges to the sewer shall meet Federal, State, and Local regulatory requirements and shall meet the permit requirements limiting MAFB discharges.

The Contractor shall coordinate with the CO, COR, QAE, and CES/CEIE for any discharges to the sanitary sewer greater than 100,000 gallons/day.

4.3.1 Restricted waste water materials include:

4.3.1.1 Any pollutants which create a fire or explosion hazard, specifically any waste stream with a closed cup flashpoint of less than sixty degrees Celsius;

4.3.1.2 Any pollutant which will cause corrosive structural damage but in no case with a pH lower than pH 5.5;

4.3.1.3 Any solid or viscous substances which may cause obstruction in the sewage system;

4.3.1.4 Any other discharge that causes Pass Through or Interference at the City of Great Falls Wastewater Treatment Plant;

4.3.1.5 Any water or waste containing metals in excess of the following limits:

Arsenic-1.57 milligrams per liter (mg/L)
Cadmium- 3.51 mg/L
Chromium, Total- 5.92 mg/L
Chromium III- 0.57 mg/L
Chromium VI- 0.04 mg/L
Copper- 0.19 mg/L
Lead- 0.14 mg/l

Mercury- 0.02 mg/L
Nickel- 0.59 mg/L
Silver- 0.62 mg/L
Selenium- 0.002 mg/L
Zinc- 2.13 mg/L
Sulfide- 3608 mg/L

4.3.1.6 Any trucked or hauled waste to include liquid waste from portable toilet facilities

5.0 **EROSION, SEDIMENT CONTROLS, AND WETLANDS**

5.1 Wetlands - The Contractor shall not enter, disturb, destroy, place fill into, or allow discharge of contaminants into any wetlands except as specifically authorized by the Government. The Contractor shall protect MAFB wetlands. Government authorization to enter specific wetlands shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries. The Contractor may obtain MAFB wetlands maps from CES/CEIE.

5.2 The Contractor shall select, provide, and maintain erosion and sediment control BMPs in accordance with Federal, State, local laws and regulations, and the MS4 Storm Water Management Plan (SWMP). The selected BMPs shall function such that they do not violate water quality standards as a result of the Contractor's construction activities.

The Contractor should minimize the area of exposed bare soil due to construction activities. Construction site plans shall include or record updated descriptions of any exposed bare soil, BMP installation and maintenance, corrective actions, etc.

5.3 The Contractor shall construct or install temporary or permanent erosion and sediment control BMPs in accordance with the MS4 SWMP or the Construction SWPPP (if applicable; see Section 4.2.2). BMPs may include, but are not limited to:

- vegetation cover
- stream bank stabilization
- slope stabilization
- silt fences
- terrace construction
- interceptor channels
- sediment traps
- culvert or flow channel inlet and outfall protection
- diversion channels
- sedimentation or retention basins

The Contractor shall remove all temporary BMPs after the area has reached stabilization and prior to the project's completion or the Construction SWPPP NOT submittal.

6.0 **TOXICS**

The Contractor shall ensure that no employees and no Government personnel suffer toxic material exposure such as airborne asbestos, lead from lead base paint, polychlorinated biphenyls (PCBs), etc.

6.1 Asbestos and Building Demolition - The Contractor shall conform to all the requirements of Montana Code Annotated, 75-2, Chapter 5, "Asbestos Control Act", Administrative Rules of Montana 17.74, Subchapter 3, "Asbestos Control" and associated Federal Regulations.

6.1.1 Building Demolition or Renovation - The Contractor shall ensure that a MDEQ-accredited asbestos inspector thoroughly inspects the facility in accordance with Administrative Rules of Montana (ARM) 17.74.354(2) prior to demolition or renovation. Note: This inspection may have occurred during the design phase (Type A or B reports). If so, the contractor may use the Accredited Asbestos Inspection Report from that project phase.

6..1.2 Building Demolition - The Contractor shall notify the Montana Department of Environmental Quality, Asbestos Control Program (1520 East 6th Avenue, PO Box 200901, Helena, MT. 59620-0901) at least 10 (ten) business days prior to any demolition work where load bearing members are removed, whether or not asbestos is present. Contractor shall use MDEQ Form MTACP02-R6 or equivalent for this notification.

6.1.3 Asbestos Hazards - The Contractor shall remove or abate all construction materials which contain asbestos per the findings and recommendations detailed in the Accredited Asbestos Inspection Report (see §6.1.1). Disturbed asbestos-containing materials which equal or exceed ten (10) square feet in area or 3 linear feet of piping insulation are subject to Montana Asbestos Abatement Project regulations. If so, the Contractor shall obtain Asbestos Project Permit coverage from MDEQ prior to starting any demolition or renovation work.

The Contractor will also comply with Occupational Health and Safety Administration (OSHA) regulations in 29 CFR 1910 (General Industry Standard) and 29 CFR 1926 (Construction Industry Standard). Note: the OSHA regulations apply to all areas which contain asbestos, including smaller areas not subject to MDEQ permitting requirements.

6.1.4 Asbestos Documents - The Contractor (or the Architect and Engineering consultant during design phases - see 6.1.1) shall provide copies of the following documents, as applicable, to the CO or COR. They will forward the documents to the CES/CEIE Asbestos Program manager:

a. Accredited Asbestos Inspection Report
b. Montana Asbestos Control Program records specified at ARM 17.74.360(3)(a) - (f) to include, at minimum:
    (a) contractor/supervisor, worker name(s), accreditations
    (b) project location, description, ACM amount abated
    (c) start date, end date for each abatement project
    (d) waste disposal facility name(s), address(es)
    (e) shipping manifests or tipping receipts from waste disposal facility
    (f) waste transporter or shipper's records

6.2 Paint and Paint Hazards - Existing Paint: Existing painted surfaces may contain lead-based paint. The Contractor shall ensure that no employee is exposed to concentrations of lead in

excess of the permissible exposure limit (PEL) equal to an eight-hour time weighted average of 50 micrograms per cubic meter (ug/m3).

The Contractor shall conform to all the requirements of 29 CFR 1926.62. Lead Workers shall wear respirators unless air testing establishes that lower protection factors are sufficient. Engineering and work practice controls may be sufficient to reduce exposure to or below the PEL. If the lead PEL is exceeded all workers shall wear appropriate personal protective equipment.

The Contractor may opt to use a steady spray of water during demolition work in order to limit worker exposures. If so, the Contractor shall contain all discharges to prevent watershed, MS4, sanitary sewer, or any other contamination. The Contractor shall not contaminate the soil with lead due to excessive use of water.

The Contractor shall limit public access and the Contractor shall prevent public exposure to any lead concentrations above the PEL.

For any remodeling or renovation work in base housing or child-occupied facilities built before 1978, certified renovators shall direct all lead paint removals, remediations, or abatemenets. The certified renovator shall meet 40 CFR 745.90(a), 40 CFR 745.90(b)(2), and all other applicable training, certification, or credentialing requirements.

For lead-based paint removal in base housing or child-occupied facilities, the Contractor shall develop a written Occupant Protection Plan. The Occupant Protection Plan is unique to the structure and shall include the requirements of 40 CFR 745.227(e)(5). Abatement workers must have appropriate EPA certification.

6.2.1 New-Paint Restriction - The Contractor shall not furnish or use any paints or coatings containing mercury or lead for interior or exterior applications. Paints, solvents, and surface preparation chemicals shall not contain Hexavalent Chromium.

6.2.2 No oil-based paints or coatings are to be used on base unless the entire liquid material is applied to the intended surface. No oil-based paint liquid is to be left for disposal by base personnel . This material shall be properly disposed of by the contractor.

6.2.3 The Government recommends that the Contractor use environmentally safe water base paints and stains where possible.

6.3 Polychlorinated Biphenyls (PCBs) - No PCBs or products containing PCBs shall be installed on Malmstrom AFB.

6.3.2 The contractor shall assume that hermetically sealed electrical equipment contains greater than 50 parts per million (ppm) PCB unless the equipment bears a label which states that it contains no PCBs.

6.3.3 Turn in all PCB containing light ballasts, capacitors, transformers, switch gear, etc. to CES/CEIE.

6.3.4 Contractor shall:

6.3.4.1 Count the number of units for turn in.

6.3.4.2 Place units in a 49 CFR 178.500, Subpart L shipping container furnished by the Contractor. Ensure the container meets Department of Transportation regulations and bears the proper labels.

6.3.4.3 Call CES/CEIE (731-6163) three days in advance to schedule contractor delivery.

7.0 **EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT**.

For contracts over $100,000, contractors shall comply with the Toxic Release Inventory reporting provisions of Emergency Planning and Right-to-Know Act (EPCRA) Section 313.

The Contractor shall provide a list of any hazardous substances listed under EPCRA along with maximum inventory and consumption. HAZMART registration fulfills this requirement. Contractors shall provide this information to CES/CEIE and HAZMART.

References: Federal Register, August 10, 1995, Vol. 60, No. 154, p40987-40992 and Federal Register, September 29, 1995, Vol 60, No. 189, p50737-50743.

8.0 **HAZARDOUS MATERIALS**

8.1 Hazardous Materials (HAZMAT) Contractor Authorization Procedures - Contractors must obtain an authorization prior to bringing any HAZMAT onto MAFB. HAZMAT includes all items covered under EPCRA (or other federal, state or local) tracking requirements, the OSHA HAZCOM Standard, and all Class I and Class II ODS.

MAFB tracks HAZMAT through the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). The contractor may obtain guidance from CES/CEIE at 731-6163 or 731-6441.

8.2 HAZMAT inventory submittal

8.2.1 Following contract award and a minimum of 30 calendar days prior to beginning work, the Contractor and all their subcontractors must submit their HAZMAT inventory to CES/CEIE through the CO, COR, or QAE. The Contractor shall provide a complete HAZMAT inventory intended for use during the contract, process or procedure descriptions, total quantities, individual container types and sizes, etc. The Contractor should use the form template provided in Attachment 2-013600.

8.2.2 The HAZMAT inventory must include a Safety Data Sheet (SDS) for each item listed. Each SDS shall be three (3) years old or less.

8.2.3 Special consideration: Single Contractors (i.e., those with no subcontractors) **and** with proposed HAZMAT inventories of 15 or fewer items may submit their list a minimum of 10 calendar days prior to beginning work.

8.3 CES/CEIE will review the submittal and identify those hazardous materials requiring HAZMAT authorization procedures within EESOH-MIS. Note that MAFB may prohibit use of some materials that the Contractor lists on Attachment 2-013600. Materials which do not require EESOH-MIS entry require no additional authorization. CES/CEIE will forward the identified hazardous materials list to the CO, COR, or QAE.

CES/CEIE and the Hazardous Materials Pharmacy (HAZMART) will coordinate entry of the listed HAZMAT into the EESOH-MIS tracking system. Note that any emergency response issues, such as acquisition of unplanned new HAZMAT, require prior CES/CEIE approvals.

8.4 HAZMART will issue bar codes each time the Contractor brings formally authorized HAZMAT onto the installation. The contractor shall provide monthly HAZMAT consumption reports to the HAZMART.

8.5 Prior to contract completion, the Contractor will submit a final report of the actual quantities used on base. CES/CEIE will coordinate with HAZMART or the Contractor to reconcile actual HAZMAT usage during the contract period. The Contractor shall submit a HAZMART account close out report to the CO ten (10) days prior to the final acceptance inspection as a formal contract submittal.

8.6 The Contractor shall remove of all excess HAZMAT from the base upon contract completion.

9.0 **STORAGE OF HAZARDOUS MATERIALS**

9.1 The contractor shall properly store all hazardous materials used on base property in designated areas in accordance with all Federal, State, local, and MAFB Fire Department regulatory requirements. Storage shall include, but not be limited to:

9.1.1 Keep containers closed when not in use.

9.1.2 Label containers and provide appropriate warning labels. Empty containers shall be labeled as empty.

9.1.3 Post hazardous signs as required.

9.1.4 Provide storage with secondary containment and routinely check for leaks and spills.

9.1.5 Store materials at a central location.

9.1.6 Flammable items must be stored in an approved flammable storage locker.

9.1.7 All fuel storage tanks must have secondary containment.

9.1.8 Compressed Gas Cylinders segregated and secured to prevent falling over.

9.1.9 Valve protection cap for a cylinder designed to accept a cap shall always be in place except when in use or connected for use.

9.2 Storage, fueling, and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. The Contractor shall store fuel, lubricants, fluids, oil, etc. in accordance with all Federal, State, Regional, and local laws and regulations. The Contractor shall store used lubricants, oil, or other fluids intended to be discarded in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations.

10.0 **HAZARDOUS WASTE**

10.1 The contractor shall properly dispose of any hazardous wastes generated from their operations and shall manage those wastes (except for those that come under Universal Waste Rules) in accordance with 40 CFR Subchapter I, Parts 260 - 268.

The contractor shall manifest all hazardous wastes per 40 CFR 263.20 and submit a copy of each waste manifest to CES/CEIE, 731-6163, within 45 calendar days of hazardous waste removal.

The contractor may obtain informal guidance from CES/CEIE on proper storage and handling of hazardous and universal waste from the contractor's MAFB operations. However, all responsibility rests with the contractor to comply with federal and state hazardous waste requirements. Any information obtained from CES/CEIE does not remove responsibility from the contractor for proper waste management.

10.1.1 The contractor shall properly collect and identify all hazardous waste generated at MAFB from their operations, including spill cleanup.

10.1.2 In the event that the Government responds to any Contractor-caused spill cleanup or hazardous waste event not covered by the Contract, the Contractor shall reimburse the government all costs associated with the disposal of the spill or hazardous waste.

10.1.3 The contractor is responsible for all fines and penalties which may stem from an EPA or State of Montana Department Environmental Quality hazardous waste inspection of their operation.

10.2 Universal Waste - See 40 CFR 273.9 for Universal Waste definitions.

10.2.1 Construction Contractors shall manage all Universal Wastes in accordance with 40 CFR 273.1 - 273.81.

10.2.2 Service Contractors shall turn Universal Waste in to CES/CEIE. Contact CES/CEIE at 731-6163 prior to any Universal Waste turn-in.

11.0 **SOLID WASTE**

11.1 Solid Waste Handling and Disposal - The Contractor shall properly handle and dispose of all job site solid waste including any laboratory testing, waste characterization, or documentation submittals required by the CO, landfill owner, local, state, or Federal agencies.

11.1.1 The Contractor shall transport all solid waste off Government property and dispose of it in compliance with local, State, and Federal solid waste disposal requirements.

11.1.2 The Contractor shall demonstrate that they dispose of wastes generated from their operations at the proper Landfill Classification for each Waste Group. Refer to ARM 17.50.503 for Waste Group II, III, and IV definitions and ARM 17.50.504 for Landfill Classification II, III, and IV definitions.

11.1.3 The Contractor shall comply with the following requirements in AFMAN32-7002 where applicable:

- Paragraph 6.8.3, Construction and Demolition (C&D) waste characterization requirements
    - Note: see ARM 17.50.502(6) for the definition of C&D waste
- Paragraph 6.8.4, C&D waste disposal
    - Note that "... Conditionally exempt small quantity generator hazardous waste that is generated as a part of a construction or demolition [C&D] project and that cannot practicably be removed from the construction and demolition waste may be included in waste disposed of in Class IV units", per ARM 17.50.504(c).
- Paragraph 6.9, *et seq*, Asbestos-contaminated C&D waste disposal provisions
- Paragraph 6.10, *et seq*, Lead paint or other lead-contaminated C&D waste disposal provisions

11.2 The Contractor shall place solid wastes, excluding grubbing and clearing debris, in containers that are emptied on a regular schedule.
11.3 The Contractor shall employ waste segregation or other measures to prevent solid waste and hazardous waste co-mingling or cross-contamination.

11.4 The Contractor shall not place any wastes in Government-owned containers or abandon any waste at MAFB, including but not limited to C&D waste.

11.5 Waste Documentation and Solid Waste Diversion - Contractors shall document waste disposal and they shall divert wastes for recycling or other uses "... in the most cost-effective manner possible in accordance with [Department of Defense Instruction] DoDI 4715.23, with consideration given to cost savings and cost avoidance ..." (AFMAN32-7002, Paragraph 6.6.1)

11.5.1 The Contractor shall coordinate with CES/CEIE and the current MAFB Installation Solid Waste Management Plan to establish a list of wastes that are qualified for diversion, recycling, or entry into the MAFB Qualified Recycling Plan.

- [Deputy Assistant Secretary of Defense] DASD memo Dated 16 March 2020, Objective/Goal to divert 60 percent of C&D debris from landfill.

11.5.2 The Contractor shall document the weights and cost data of all disposed wastes, diverted, or recycled materials on the "Summary of Solid Waste Disposal and Diversion" form at Attachment 1-013600. CES/CEIE must receive the completed form by the 10th of each month. In general, the Contractor must report weights and cost data of:

- recycled materials
- diverted wastes
- non-hazardous wastes
- C&D wastes or debris, to include as separate items:
    - uncontaminated C&D waste or debris
    - asbestos-contaminated C&D waste
    - lead-paint or other lead-contaminated C&D waste

11.5.3 The Contractor shall provide copies of all disposal documents, weight tickets, etc. to the CO, COR, or QAE.

11.6 The Contractor shall bear cleanup costs for improperly disposed wastes or for removal of improperly placed hazardous waste materials.

12.0 **SPILLS AND SPILL RESPONSE**

12.1 The Contractor shall immediately report spills of any type material (excluding clean water) to CES/CEIE (731-1423) and the CO, COR, or QAE for evaluation to determine cleanup procedures and evaluate the need for reporting.

12.2 The Contractor shall reimburse the Government for the costs of any cleanups or disposal accomplished by Malmstrom personnel or by a Malmstrom cleanup contractor.

12.3 The Contractor shall comply with the MAFB Spill Prevention Control and Countermeasure Plan (SPCC). Only trained personnel shall handle or clean up spills. Refer to 40 CFR 112, 29 CFR 1910.120 and the MAFB SPCC for detailed information.

12.4 Any hazardous product or material of environmental concern cleaned up at MAFB must be tested to determine if it is a hazardous waste.

12.5 Spill Response procedures.

12.5.1 Determine if the Contractor can contain the spill. If so, follow the procedures in Paragraph 12.5.5.

12.5.2 For spills beyond the Contractor's capabilities, immediately call the MAFB Fire Department at 911 from a base phone or 731-3746 from a cell phone.

12.5.3 Evacuate the area downwind of the spill if warranted by type of release.

12.5.4 Ensure all workers safely shut down their operations and secure their equipment, time permitting.

12.5.5 If the spill can be contained without injury to personnel and without assistance from the MAFB Fire Department or other emergency response personnel, perform the following:

12.5.5.1 Stop the spill's source.

12.5.5.2 If on site containment, safety equipment, and absorbent materials are available: Contain and/or control the release. Clean up the release using proper absorbent media for the chemical spilled. Recover as much of the spill as possible using absorbent media or approved vacuum device to minimize hazardous waste volume. DO NOT hose down the spilled material into floor trench drains, storm drains, or sanitary sewer manholes.

12.5.5.3 *Immediately* report the spill to the CO, COR, or QAE ***and*** CES/CEIE (731-1423). CES/CEIE will provide reporting guidance and suggested disposal procedures for recovered material. Regardless of CES/CEIE guidance, however, the Contractor shall be responsible for proper handling and disposal of clean up materials.

13.0 DISCOVERY OF CONTAMINATED SOILS, MILITARY MUNITIONS, AND HISTORIC, ARCHAEOLOGICAL, OR CULTURAL RESOURCES

13.1 Contaminated Soil - indicated by petroleum odors, unnatural colors, unusual textures, etc.

13.1.1 The Contractor shall follow the spill procedures in Section 12.0 if they encounter any contaminated soil. Immediately notify the CO, COR, or QAE and CES/CEIE (731-1423).

13.1.2 Following site evaluation, the CO, in collaboration with CES/CEIE, will advise of the steps that the contractor must follow to complete the work through the contaminated area. Work practices or personnel requirements may include but not be limited to:

- 40 hour Hazardous Waste Operations and Emergency Response training
- Confined Space Entry training and permitting
- Respiratory protection
- Completion of a Site Safety & Health Plan

13.1.3 MAFB Contracting Squadron personnel will negotiate any additional costs for work in the contaminated area not specified in the original contract.

13.2 Military Munitions - In the event the Contractor discovers or uncovers military munitions as defined in 40 CFR 260.10, the Contractor shall immediately stop work in that area and immediately inform the CO, COR, or QAE.

13.3 Historic, Archaeological, or Cultural Resources

13.3.1 The Contractor shall protect Historical, Archaeological, and Cultural Resources and shall be responsible for their preservation during the life of the Contract.

13.3.2 If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to:

- any human skeletal remains or burials
- artifacts
- shell, midden, bone, charcoal, or other deposits
- rock or coral alignments, paintings, wall, or other constructed features
- any indication of agricultural or other human activities.

13.3.3 Upon such discovery or find, the Contractor shall immediately:

- Cease all activities that may result in impact to or the destruction of these resources.
- Notify the CO, COR, or QAE ***and*** 341 CES/CEIE so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made.
- Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

14.0 CONSTRUCTION CERTIFICATIONS – PUBLIC WATER SUPPLY AND WASTEWATER SYSTEMS

14.1 During this project's development stages, designers submitted the final drinking water system (or sewer system) plans and specifications to MDEQ for review and approval. Per ARM 17.38.101(4), the plans and specifications must bear a Montana-licensed Professional Engineer (PE) seal. MDEQ has approved the sealed plans and specification for construction. In the absence of properly sealed plans and specifications, the Contractor shall cease work and coordinate with the CO regarding the path forward.

14.2 Per ARM 17.38.101(13), a Montana-licensed PE shall prepare and submit a letter to MDEQ certifying that the system or portion of the system constructed, altered, or extended to that date was completed in accordance with plans and specifications approved by MDEQ (see Paragraph 14.1). The Contractor must submit this letter before any person may commence or continue operation of a public water supply or wastewater system. The Contractor shall provide a copy of the letter to the CO and 341 CES/CEIE

14.3 Per ARM 17.38.101(14), a Montana-licensed PE shall prepare, sign and submit certified "as built" drawings and, if required, operations and maintenance manuals to the MDEQ within 90 days after the completion of construction, alteration, or extension of a public water supply or wastewater system, or any portion of such system. The Contractor shall provide one full size mylar copy of

the as-built drawings, two paper copies, one AutoCAD compatible drawing file, and one Adobe Acrobat (PDF-format) file on compact disk to the CO.

14.4 The Contractor shall provide qualified inspectors or coordinate with the Montana-licensed PE throughout the project as necessary to meet the requirements in Paragraphs 14.1 to 14.3. During project activities, the Contractor shall provide construction inspection services as required by the Montana-licensed PE who will seal the "as built" drawings.

15.0 ENVIRONMENTAL MANAGEMENT SYSTEM

15.1 Contractor personnel shall receive appropriate environmental training in accordance with Federal Acquisition Regulation (FAR) 52.223-19 if the contract has potential to negatively impact the environment.

15.2 Perform work under this contract consistent with the policy and objectives identified in the installation's Environmental Management System (EMS). Perform work in a manner that conforms to objectives and targets of the environmental programs and operational controls identified by the EMS. Support Government personnel when environmental compliance and EMS audits are conducted by escorting auditors at the Project site, answering questions, and providing proof of records being maintained. Provide monitoring and measurement information as necessary to address environmental performance relative to environmental, energy, and transportation management goals. In the event an EMS nonconformance or environmental noncompliance associated with the contracted services, tasks, or actions occurs, take corrective and preventative actions. In addition, employees must be aware of their roles and responsibilities under the installation EMS and of how these EMS roles and responsibilities affect work performed under the contract.

Coordinate with the installation's EMS coordinator to identify training needs associated with environmental aspects and the EMS and arrange training or take other action to meet these needs. Provide training documentation to the Contracting Officer. The Installation Environmental Office will retain associated environmental compliance records.

END OF SECTION

ATTACHMENT 1-013600

SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION

Project:_____

Project Number:_____ Contract Number:_____

Contractor Names: _____

Address:_____Phone: _____

Submitter's Name:_____Report Period Start:_____ End: _____

Provide information MONTHLY by the 10th day after end of reporting period.

Type of Material	Disposed in Municipal Solid Waste Landfill		Diverted from Landfill by Recycling/Reuse QTY/Cost/Profit		
	Weight / Units (lb, ton, etc.)	Total Cost (Tipping fee, Transport, etc.)	Weight / Units (lb, ton, etc.)	$ received (recycled) or <*$ paid*> (disposal)	Other (donation, etc.)
Asphalt					
Concrete					
Pipe Insulation					
Ferrous Metal					
Non-Ferrous Metal					
Wood					
Debris					
Glass					
Porcelain					
Brick					
Bond Paper					
Newsprint					
Cardboard					
Plastic					
Gypsum					
Paint and paint cans					
Other					

Signature:_____ Title:_____

Date:_____ Questions? Call Solid Waste Manager at 731-6448 Data Base Input :_____

ATTACHMENT 2-013600 - EESOH-MIS Hazardous Materials List

Contractor Name:	Project Name / Description:	Contract #:			Container		Aerosol? Y/N
LINE #	**TRACK**	**MATERIAL TYPE (Product Name)**	**MSN ***	**SDS ***	**Type ***	**Size ***	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12		=					
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

* MSN = Material Stock Number. * SDS = Safety Data Sheet. * Container type: Box, can, tube, barrel, pail, etc. * Container size: INCLUDE UNITS (pounds, gallons, ounces, etc.)

DIVISION 3 – CONCRETE

SECTION 03 01 00

CONCRETE REPAIR

PART 1 GENERAL

1.1 RELATED DOCUMENTS

1.1.1 The Contract Drawings and sections elsewhere in this Specification apply.

1.1.2 Concrete condition examples are provided in Appendix A for reference only.

1.2 SUMMARY

1.2.1 This Section specifies concrete repair, including formwork, placement procedures, and finishes.

1.2.2 Concrete repair includes the following:

1.2.2.1 Repair of structural or stress cracks, repair of existing joints and repair of deteriorated/damaged/broken concrete.

1.3 QUALITY ASSURANCE

1.3.1 Materials and installed work may require testing and retesting at any time during progress of Work. Tests, including retesting of rejected materials for installed Work, shall be done at Contractor's expense.

1.4 ACTION SUBMITTALS

1.4.1 Product Data: For each type of product submit manufactures data for storage, application, maintenance and warranty.

PART 2 PRODUCTS

2.1 CONCRETE REPAIR PRODUCTS

2.1.1 For configuration and control purposes (due to weapon system and maintenance requirements) all items identified in Part 3 Execution shall be provided as listed, no substitutes or "approved equals" will be allowed. Model numbers shall match as identified. If any item identified is no longer available, the contractor shall notify the Government as soon as this is known by sending a request for information (RFI) identifying the discrepancy. This list will have precedence over the drawings or individual sections that may specify materials or equipment.

2.1.2 Water: Potable.

PART 3 EXECUTION

3.1 FORMS

3.1.1 Construct forms to sizes, shapes, lines, and dimensions shown and to obtain accurate alignment, location, grades, level, and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, moldings, rustications, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required in the Work. Use selected materials to obtain required finishes. Solidly butt joints and provide backup at joints to prevent cement paste from leaking.

3.1.2 Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses, and the like for easy removal.

3.1.3 Chamfer exposed corners and edges as indicated, using wood, metal, PVC, or rubber chamfer strips fabricated to produce uniform smooth lines and tight edge joints.

3.1.4 Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, or other debris just before placing concrete. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

3.2 CONCRETE REPAIR

3.2.1 Areas identified for "Crack Repair" shall be repaired as follows:

3.2.1.1 Crack shall be routed with a diamond blade to a minimum of ¼" by ¼" slot and have clean vertical sides. Install bond breaker tape and caulk using Sikaflex 1A.

3.2.2 Areas identified for "Joint Repair" shall be repaired as follows:

3.2.2.1 Open joints. Clean debris from joints. Grind sides of joint down to clean surface. Install appropriate size backer rod and caulk with Sikaflex 1A.

3.2.2.2 Joints with previously installed sealant. Remove old sealant between concrete and/or steel surfaces. Grind sides of concrete to clean surface; steel to bright clean surface. If needed, route with angle grinder and diamond blade to create a minimum of ¼" by ¼" slot. Install bond breaker tape and appropriate size backer rod. Caulk with Sikaflex 1A.

3.2.3 Areas identified for "Slab Repair" shall be repaired as follows:

3.2.3.1 Saw cut if necessary and remove all loose and/or damaged concrete, prepare the surface in accordance with the manufacturer's recommendations, and repair with one of the methods listed below.

3.2.3.1.1 Screed mortar for form and pour applications use Siktop 111-plus.

3.2.3.1.2 Trowel grade mortar for horizontal applications use Sikatop 122-plus.

3.2.3.1.3 Non-sag mortar for hand trowel applications use Sikatop 123-plus.

3.2.3.1.4 Base plate grout repair use Sikadur 42, Sikagrout 328 or Quikrete Non-Shrink Precision Gout.

3.2.4 Cold-Weather Placement: Comply with provisions of ACI 306 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures. Follow all manufactures recommendations for cold weather placement.

3.2.4.1 Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

3.2.4.2 Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators.

3.2.5 Hot-Weather Placement: When hot weather conditions exist that would impair quality and strength of concrete, place concrete complying with ACI 305 and as recommended by manufacturer.

3.3 SLAB REPAIR FINISHES

3.3.1 Nonslip Broom Finish: Apply a nonslip broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.

3.3.1.1 Immediately after float finishing, slightly roughen concrete surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with Contracting Officer before application.

3.4 REUSING FORMS

3.4.1 Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-coating compound as specified for new formwork.

3.4.2 When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joint to avoid offsets. Do not use patched forms for exposed concrete surfaces except as acceptable to Contracting Officer.

END OF SECTION 03 01 00

CRACK REPAIR

JOINT REPAIR

SLAB REPAIR

SLAB REPAIR (Cont.)