DEPARTMENT OF THE ARMY
US ARMY DEVCOM SOLDIER CENTER
15 GENERAL GREENE AVENUE
NATICK MA 01760

Attachment 1 – Common Specifications

1. Hours of Operation (for all work performed on the installation):

1.1. The site for all work is on a military installation known as the US Army Soldier Systems Center, in Natick, Massachusetts, hereinafter called NSSC. All rules and regulations issued by the Commanding Officer covering general safety, security, sanitary requirements, pollution control and traffic regulations shall be observed by the Contractor. Information regarding these requirements may be obtained by contacting the Contracting Officer (KO), who will provide such information or assist in obtaining same from appropriate authorities.

1.2. The Contractor may submit a written request for Government approval to work on weekends and holidays. The request shall be submitted a minimum of ten (10) days in advance, and if approved, it shall be authorized in writing. The Government reserves the right to deny such requests. It is anticipated that work on weekday and weekends during the off hours will be required to complete work within the Period of Performance. The following legal holidays are observed:
January 1st
Third Monday in January
Third Monday in February
Last Monday of May
Juneteenth
July 4th
1st Monday of September
2nd Monday of October
11th of November
Fourth Thursday of November
25th of December

When one of the above designated legal holidays falls on a Sunday, the following Monday will be observed as a legal holiday. When a legal holiday falls on a Saturday, the preceding Friday is observed as a holiday.

1.3. All work shall be performed during normal business hours, Monday through Friday from 6:00 am to 5:00 pm unless otherwise authorized and coordinated in advance by the Contracting Officer Representative (COR). The COR shall be notified a minimum of five (5) working days in advance of all work requested to be performed outside of normal business hours.

1.4. Interior Work - After business hours are as follows: 5:00 pm to 7:00 am on week days (Monday-Friday) and 7:00 am to 6:00 pm on weekends (Saturday & Sunday).

1.5. Exterior Work - After business hours are as follows: 5:00 pm to 7:00 pm on week days (Monday–Friday) and 7:00 am to 7:00 pm on weekends (Saturday & Sunday).

2. Antiterrorism/Operations Security Requirements:

2.1. **AT Level 1 Training (OPSEC Cover Sheet, Part 1):** All Contractor employees, to include subcontractor employees, requiring access Army installations, facilities and controlled access areas shall complete AT Level I awareness training within thirty (30) calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The Contractor shall submit certificates of completion for each affected Contractor employee and Subcontractor employee, to the COR or to the contracting officer, if a COR is not assigned, within five (5)

calendar days after completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: http://jko.jten.mil.

2.2. **Access and general protection/security policy and procedure (OPSEC Cover Sheet, Part 2):** The Contractor and all associated Subcontractors' employees shall provide all information required for background checks to meet installation access requirement to be accomplished by installation Director of Operations, Protection or Security Manager. The Contractor workforce shall comply with all personal identity verification requirements as directed by Department of Defense (DOD), Head Quarters Department of the Army (HQDA) and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in Contractor security matters or processes.

NOTE:
"In accordance with ANNEX M (MISSION ESSENTIAL FUNCTIONS (MEF)) to USAG-Natick CONTINUITY OF OPERATION PLAN (COOP), this project IS NOT designated a MEF."

5.2a. For contractors requiring Common Access Card (CAC). Before CAC issuance, the contractor employee requires, at a minimum, a favorably adjudicated National Agency Check with Inquiries (NACI) or an equivalent or higher investigation in accordance with Army Directive 2014-05. The contractor employee will be issued a CAC only if duties involve one of the following: (1) Both physical access to a DOD facility and access, via logon, to DOD networks on-site or remotely; (2) Remote access, via logon, to a DOD network using DOD-approved remote access procedures; or (3) Physical access to multiple DOD facilities or multiple non-DOD federally controlled facilities on behalf of the DOD on a recurring basis for a period of 6 months or more. At the discretion of the sponsoring activity, an initial CAC may be issued based on a favorable review of the FBI fingerprint check and a successfully scheduled NACI at the Office of Personnel Management.

5.2b. For contractors that do not require CAC, but require access to a DOD facility or installation. Contractor and all associated sub-contractors employees shall comply with adjudication standards and procedures using the National Crime Information Center Interstate Identification Index (NCIC-III) and Terrorist Screening Database (TSDB) (Army Directive 2014-05/AR 190-13), applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative), or, at OCONUS locations, in accordance with status of forces agreements and other theater regulations.

2.3. **Awareness Training for Contractor Personnel Traveling Overseas.** Does not apply to USAG-Natick contracts.

2.4. **iWATCH Training.** ***This standard language is for contractor employees with an area of performance within an Army controlled installation, facility or area.*** The contractor and all associated sub-contractors shall brief all employees on the local iWATCH program (training standards provided by the requiring activity ATO). This locally developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and within 05 calendar days of new employees commencing performance with the results reported to the COR NLT 30 calendar days after contract award.

2.5. **Army Training Certification Tracking System (ATCTS) registration for contractor employees who require access to government information systems.** All contractor employees with access to a government information systems must be registered in the ATCTS (Army Training Certification Tracking System) at commencement of services, and must successfully complete the DOD Information Assurance Awareness prior to access to the IS and then annually thereafter.

2.6. **For contracts that require a formal OPSEC program.** The contractor shall develop an OPSEC Standing Operating Procedure (SOP)/Plan within 90 calendar days of contract award, to be reviewed and approved by the responsible Government OPSEC officer. This plan will include a process to identify critical information, where it is located, who is responsible for it, how to protect it and why it needs to be protected. The contractor shall implement OPSEC measures as ordered by the commander. In addition, the contractor shall have an identified certified Level II OPSEC coordinator per AR 530-1.

2.7. **For contracts that require OPSEC Training.** Per AR 530-1 Operations Security, the contractor employees must complete Level I OPSEC Awareness training. New employees must be trained within 30 calendar days of their reporting for duty and annually thereafter. OPSEC Awareness for Military Members, DOD Employees and Contractors is available at the following website: http://cdsetrain.dtic.mil/opsec/index.htm

2.8. **For Cyber Awareness (Information assurance (IA)/information technology (IT)) training.** All contractor employees and associated sub-contractor employees must complete the DOD Cyber awareness training before issuance of network access and annually thereafter. All contractor employees working IA/IT functions must comply with DOD and Army training requirements in DODD 8570.01, DOD 8570.01-M and AR 25-2 within six months of appointment to IA/IT functions. DOD Cyber Awareness Challenge Training is available at the following website: https://ia.signal.army.mil/DODIAA/

2.9. **For Cyber (Information assurance (IA)/information technology (IT)) certification.** Per DOD 8570.01-M , DFARS 252.239.7001 and AR 25-2, the contractor employees supporting Cyber (IA/IT) functions shall be appropriately certified upon contract award. The baseline certification as stipulated in DOD 8570.01-M must be completed upon contract award.

2.10. **For contractors authorized to accompany the force.** Does not apply to contracts at USAG-Natick.

2.11. **For Contract Requiring Performance or Delivery in a Foreign Country, DFARS Clause 252.225-7043, Antiterrorism/Force Protection for Defense Contractors Outside the US.** Does not apply to contracts at USAG-Natick.

2.12. **For contracts that require handling or access to classified information.** Contractor shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified "Confidential," "Secret," or "Top Secret" and requires contractors to comply with— (1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DOD 5220.22-M); (2) any revisions to DOD 5220.22-M, notice of which has been furnished to the contractor.

2.13. **Threat Awareness Reporting Program.** For all contractors with security clearances. Per AR 381-12 Threat Awareness and Reporting Program (TARP), contractor employees must receive annual TARP training by a CI agent or other trainer as specified in 2-4b of AR 381-12.

2.14. **For contracts that require delivery of food and water.** This standard language is for contractor employees with an area of performance delivering food and water within an Army-controlled installation, facility or area. The supplies delivered under this contract shall be transported in delivery conveyances maintained to prevent tampering with and / or adulteration or contamination of the supplies, and if applicable, equipped to maintain a prescribed temperature. All delivery vehicles will also be subject to inspection at all times and all places by the Contracting Officers Representative, Post Veterinarian, and / or Law enforcement Officials. When the sanitary conditions of the delivery conveyance have led, or may lead to product contamination, adulteration, constitute a health hazard, the delivery conveyance is not equipped to maintain prescribed temperatures or the transport results in product "unfit for intended purpose", supplies tendered for acceptance may be rejected without further inspection. As the holder of a contact with the Department of Defense, it is incumbent upon the awardee to insure that all products and/or packaging have not been

tampered or contaminated. Delivery conveyances will be locked or sealed at all times, except when actively loading or unloading. Unsecured vehicles will not be left unattended. All incoming truck drivers will provide adequate identification upon request. In the event of an identified threat to an installation, or a heightened force protection/Homeland Security threat Level, the contractor may be required to adjust delivery routes to minimize vulnerability risks and enable direct delivery to DOD facilities.

3. Protection Division, Directorate of Operations:

3.1. The Contractor shall submit employee's names and information on NSSC Contractor Access Request Form (See Attachment #2) for background investigation for all employees and subcontractors that will be entering Army-controlled installations or facilities, a minimum of seven (7) business days prior to arrival via email to COR and Protection Division. The company shall ensure that its employees entering Army-controlled installations or facilities have obtained access badges and passes in accordance with facility regulations and that these badges and passes are obtained in advance so as not to delay the accomplishment of contracted services. It is also required that the contracting company owner, project manager, site supervisor and safety officer also acquire a personal badge for installation entry as they are expected to be on site managing the work on a frequent, if not continuous, basis throughout the performance period of the project. All Contractor personnel that have a Permanent Resident Card or Alien Registration Receipt Card (Form I-551) a.k.a. "Green Card", shall possess them when entering the installation.
Immediately report instances of lost or stolen badges to the Contracting Officer. Badges shall be worn and be visible at all times while on the Installation. The Contractor shall be responsible for returning all Identification Badges to the Contracting Officer after completion of the project. Final payment will not be made until all badges are returned and have been accounted for.

3.2. During Force Protection Conditions (FPCONs) CHARLIE and DELTA, contracted services may be limited or discontinued. Contracted services will resume when the FPCON level is reduced to level BRAVO or lower.

3.3. The Contractor shall be responsible for maintaining a secure construction site and ensure NSSC installation perimeter confined to the area of the scope of this contract is secure at all times during and after work hours. Areas of staging, material storage and equipment shall be reviewed with the KO for approval at pre-construction meeting. Fencing may be provided or required for these areas and to secure the construction site.

3.4. At the close of each work day, Government facilities, equipment, and materials shall be secured.

3.5. The Contractor shall be responsible for all arrangements for the receipt of materials and supplies at the job site. Government personnel are not permitted to receive or sign for items delivered to the site. All Contractor deliveries shall be coordinated by the Contractor to arrive direct to the job site. The delivery driver shall be provided with address and exact location on post to deliver to, name of the Contractor's supervisor and/or the name of the Contractor employee who will receive and sign for the delivery item(s). Off-loading and labor and equipment for such is the responsibility of the Contractor. All deliveries shall be coordinated in advance with NSSC Police.

3.6. The Contractor and all associated Sub-contractors' employees shall comply with applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative). Increased Security upon Entry into NSSC: Since the events of 11 September 2001, security at the U.S. Army Natick Soldier Systems Center has increased making entry into the installation more time consuming at certain times and under certain circumstances. The Contractor is responsible for familiarizing himself/herself with the entry procedures at designated Contractor entry gate and expected delays, and for including all costs for same in their base contract bid price. No future request for adjustment in neither price nor time will be allowed due to Contractor entry conditions and circumstances.

4. Contractor Personnel Conduct:

4.1. The Contractor personnel's conduct shall not reflect discredit upon the Government. Contractor shall ensure that personnel present a professional appearance. The Contractor's employees shall observe and comply with all local policies and procedures concerning fire, safety, environmental protection, sanitation, security, and possession of firearms or other lethal or illegal weapons or substance. The Contractor is responsible for ensuring that any Contractor employees providing services under this contract conduct themselves and perform services in a professional, safe, and responsible manner. The Contractor shall remove from the job site any employee for reasons of misconduct or security. The Contractor shall ensure no Contractor's employees conduct political related activities or events at NSSC.

4.2. Smoking is prohibited within and outside of all buildings on installations under the ownership of NSSC except in designated smoking areas. This includes, but not limited to, existing buildings, buildings under construction and buildings under renovation. Discarding tobacco materials other than into designated tobacco receptacles is considered littering and is subject to fines. The Contracting Officer will identify designated smoking areas.

5. Submittals:

5.1. In accordance with the submittal checklist (Attachment 5) and as listed in this SOW and accompanying documents, the Contractor shall submit for approval to the Contracting Officer Representative (COR), a minimum of ten (10) calendar days prior to purchasing and installing submittal items, all material samples/swatches and/or manufacturer specifications/cut sheets to include but not limited to: Fire protection systems for smoke heat and fire alarms and complete building sprinkler system designs, controls and fixtures for all systems (fire protection, electrical, HVAC; windows, doors, frames and related hardware, mill work and all related hardware; finishes for paint colors, carpet, continuous roll vinyl base; ceiling tile and grid, hardware, etc., proposed electrical conduits, raceways, wiring, circuit breakers, light fixtures and emergency lights. All material finishes / colors for above as applicable shall be submitted.

5.2. All required submittals, cut sheets, construction details, etc. shall be submitted to the COR. Each submittal shall be complete and of sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor and each item shall be stamped, signed, and dated by the Contractor indicating action taken. Proposed deviations from the contract requirements shall be clearly identified.

5.3. The Contractor shall submit to the COR, a list of all hazardous materials and their associated Safety Data Sheet (SDS) sheets and statement of plans for storage and use. No hazardous materials shall be stored or used at NSSC prior to submission of the material's SDS and approval by NSSC Environmental office of the Contractor's plans for storage and use of the hazardous materials. The COR shall submit this information to the Environmental office and notify the Contractor of the resulting approval or rejection within ten (10) business days.

5.4. Submittals for any required information shall require up to ten (10) business days for review.

5.5. The COR's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist.

5.6. The Contractor shall make all corrections required by the COR and promptly furnish a corrected submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract FAR Clause 52.243-4 "Changes" shall be given promptly to the COR.

5.7. The Government has the right to reject any submittals not meeting the requirements and standards set forth in the SOW and accompanying contract documents. All rejected submittals shall require a re-submittal prior to the

performance of any associated work commencing, to include but not limited to demolition and construction phases of work.

5.8. Within ten (10) calendar days of the preconstruction meeting the Contractor shall submit a construction schedule in Gantt Chart form to the COR, outlining the duration, start and completion dates for all major disciplines and milestones for both demolition and construction phases.

5.9. Scheduling of work is of critical importance for impacts to the building occupants due to noise and building access. The schedule shall be updated weekly as required to reflect actual progress. Due to the nature of the work, it is understood that weather can impact progress and schedule updates help plan and modify closure activity and notification to the staff. Schedule updates may be modified by written approval by the Contracting Officer (KO) and COR.

5.10. The Contractor shall keep a daily log of all major on site construction activity and provide to the COR at close of each business day. The daily log shall be provided to the COR via email and include photographs as applicable to depict work performed and as directed from COR in absence of government inspections to include but not limited to interior and exterior utilities before they are concealed.

5.11. The Contractor shall schedule a meeting and meet with the COR on a weekly basis throughout the performance period to review and report current status and schedule of the job's progress as well as coordinate between various tasks of the project and the impacts upon NSSC such as physical security, other occupants on post, etc.

6. <u>Inspections and Testing:</u>

6.1. The KO, COR and NSSC Department of Public works (DPW) designated personnel shall be provided the opportunity to inspect all aspects of the work during the entire course of the performance period. Scheduled inspections shall take place at intervals as agreed upon in the preconstruction meeting and throughout period of performance and as noted in List of Required DPW Inspections, if provided, and entered into the Gantt Chart construction schedule. The Contractor shall coordinate Government inspections, to occur during normal business hours, with the COR five (5) business days in advance. The Contractor shall remove material as required to complete inspections if proper notification for scheduled inspection is not given. The COR will determine if the specifications and requirements of the contract documents have been met. The Contractor shall perform all necessary work to correct any deficiencies identified by the COR to ensure compliance with all contract documents during the performance period.

6.2. When all work has been completed by the Contractor and checked by the COR, the Contractor shall provide the COR with the opportunity to witness the final, actual operation and testing of systems and equipment. Before final acceptance, any deficiencies discovered during testing shall be promptly corrected by the Contractor and readjusted until the systems are functioning properly.

7. <u>Health and Safety Plan:</u>

7.1. The Contractor shall submit to the COR, a minimum of fourteen (14) calendar days prior to any on-site work being performed, a health and safety plan for Contractor personnel, including at a minimum, personal protective clothing and equipment such as but not limited to, safety goggles, dust masks, hard hats, protective barriers, signage, caution tapes, dust barriers, etc. The Health and Safety plan submittals shall be approved before any affected on site work can be performed.

7.2. The Contractor shall ensure that all activity hazards are identified in the health and safety plan for every applicable and unique demolition and construction activity, including but not limited to the following examples: connecting/ disconnecting power supply; welding and torch cutting (Hot Work); drilling into concrete, etc. Hot Work / Permits to Louis Calcagni, Garrison Safety Manager (508) 206-4020.

7.3. The Contractor shall take all necessary precautions in observing safety regulations in accordance with Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS which can be found at: https://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs and EM 385-1-1, and shall assume the responsibility to guard against causing of fires and/or explosions and to protect Government property. The Contractor shall perform the work in a manner consistent with security requirements and fire safety regulations especially with regard to exits and exit way access during construction. Temporary closures shall not compromise life safety, security or fire safety. For a copy of EM 385-1-1, visit the following website: https://www.usace.army.mil/.

7.4. Workers in elevated work areas in excess of six (6) feet above an adjoining surface require special safety attention. In addition to the provisions of EM 385-1-1, the following safety measures are required to be submitted to the Contracting Officer. Prior to commencement of work in elevated work areas, the Contractor shall submit drawings depicting all provisions of his positive protection system including, but not limited to, all details of guard rails.

7.5. Positive protection for workmen engaged in work that is at a height of six (6) feet or greater shall be provided by safety nets, tie-offs, hydraulic man lifts, scaffolds, or other required means. Decking crews shall be tied-off or work over nets or platforms not over six (6) feet below the work area. Walking on beams and/or girders and the climbing of columns is prohibited without positive protection.

7.6. Perimeter guard rails shall be installed at floor, roof, or wall openings more than six (6) feet above an adjoining surface and on roof perimeters. Rails shall be designed to protect all phases of elevated work. Rails shall be designed by a licensed engineer to provide adequate stability under any anticipated impact loading. As a minimum, the rails shall consist of a top rail at a height of forty two (42) inches, a mid rail and a toe board. Use of tie-offs, hydraulic man lifts, scaffolds, or other means of roof edge protection methods may be utilized on small structures such as family housing, prefabricated metal buildings, etc.

7.7. The Contractor shall develop and implement an activity/site-specific Confined Space (CS) Program as necessary when the work to be performed requires compliance with the elements of 29 CFR 1910.146 and/or the recommendations of installation Safety and Health professionals. It is the responsibility of the site supervisor or project manager to ensure all entries into a CS are completed in a safe and protective manner. The procedures shall be documented in a CS program which is part of the Project Safety and Health Plan.

7.8. The Contractor is alerted to the requirements of Contract FAR Clause 52.236-12 "CLEANING UP" and to the requirements of UFC 3-600-01, EM 385-1-1, and NFPA 241 for fire protection during building construction and demolition operations. This item shall be covered in the submittal required under Contract FAR Clause 52.236-13 Atl I "ACCIDENT PREVENTION". Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with EM 385-1-1 and NFPA 10. This standard is available from www.NFPA.org.

7.9. Store, dispense and use liquids in accordance with EM 385-1-1.

7.10. Means of egress: Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces to the site and building. Do not block exits for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with the Contracting Officer. Inspect access points daily. Report the findings of obstructions and corrective actions, weekly to the Contracting Officer.

7.11. Construction Fire and Safety: The Contractor shall follow NFPA 241, Safeguarding Construction, Alteration, and Demolition Operations, during the course of the work. Trash chutes shall follow these requirements for proximity to the building as noted. The Contractor shall also comply with NFPA 1 (2015), section 19.2.1.4 which states that dumpsters over one and a half (1.5) cubic yards shall not be placed within ten (10) feet of combustible walls, openings, or combustible roof eave lines. Comments provided by the Fire Inspector during laydown submission by the Contractor

shall also be followed. The Contractor shall leave fire alarm pull stations in place whenever possible to alert the fire and law enforcement personnel to a fire while the building is occupied during construction. Efforts should be made to protect all fire alarm devices from physical damage and accidental activation whenever possible. Temporary heat detectors may be used to provide detection nights and weekends when the building is unoccupied by Contractors.

7.12. All construction sites are subject to fire and safety inspections without notice. Any violation of fire and safety standards may result in a work stoppage at the expense of the Contractor.

7.13. Throughout the course of this project caution tape and safety warning signs shall clearly mark all construction areas where the potential exists for personnel not involved with the construction to enter or pass. When it is necessary for non-construction personnel to pass through a construction area, flag persons shall be posted at all key points to ensure the safety of the non-construction personnel, particularly during construction operations that pose a potential threat to safety.

7.14. The Contractor shall maintain a safe, orderly and reasonably clean work environment throughout the performance period and is subject to unannounced OSHA and NSSC inspections.

7.15. The Contractor shall be responsible for contacting and coordinating with DIGSAFE (call 811 or 888-DIG-SAFE) prior to any excavation work according to regulations: "220 CMR 99.00: Massachusetts Department of Public Works" and "The Dig Safe Law in Massachusetts G.L. C. 82, & 40, 40A through 40E." Also, the Contractor shall use Ground Penetrating Radar (GPR) to confirm locations of all underground utilities prior to any excavation. The Contractor shall perform hand digging when exact location of underground utilities is not known.

7.16. Use of Trench Boxes and/or sheeting and/or ground sloping in excavation pits shall be in accordance with OSHA. Safety Office to approve prior to excavation.

7.17. Fire protection systems (Sprinklers, Alarms, Controls, etc.) shall be maintained in service unless coordinated and approved by the COR and Installation Fire Protection Inspector and identified in the Health and Safety Plan if service is to be temporarily interrupted.

7.17.1. The Contractor shall notify Mr. James Santoro (Chief of Police) and Garrison Safety Manager, Louis Calcagni 48 hours prior to any Fire Protection Systems work. No work shall begin until Fire Protection Inspector's approval.

7.17.2. All work associated with the Fire Alarms and Fire Protection shall be a part of the work. Work required by Simplex for fire alarm controls shall be engaged and paid for by the Contractor.

7.17.3. The fire alarm/mass notification system throughout the installation consist of addressable and interconnected Johnson Controls Simplex panels.

7.17.4. Only qualified personnel, as defined in NFPA 72, may perform work on the fire alarm/mass warning notification systems and its components.

7.17.5. Whenever work is to be conducted in a building that affects any fire alarm system and/or its components, such as disconnecting, moving, relocating, adding or subtracting devices, and/or rewiring of any fire alarm system devices, the contractor responsible for the project must contract, at the contractor's expense, with Johnson Controls to:

(1) Examine said panels for any existing trouble or faults prior to the start of any work affecting the fire alarm control panel(s). Disable all devices and/or zones which will be affected by the work
(2) Verify all wiring and devices are properly connected to the fire alarm panel(s) and conduct panel programming to all panels affected by the project once entire project is completed.

(3) Conduct final acceptance testing of the systems per NFPA 72 requirements once the project is completed, and provide written documentation of the testing to the COR and fire protection inspector.
(4) The Fire Protection Inspector must be notified prior to all examination and work on fire alarm control panels.

7.18. **Hot Work:**
7.18.1. It is the responsibility of the Contractor, without exception, to obtain a permit for all "Hot Work", which includes but is not limited to, torch cutting, welding, laser cutting, metal grinding, soldering, etc. Hot Work / Permits to Louis Calcagni, Garrison Safety Manager (508) 206-4020 or Mike Franciose (508) 206-4122..

7.18.2. Those performing the hot work shall have completed the NFPA, "Hot Works Safety Certificate 1-Day Program" or "Gould Construction Institute Hot Works Training". Permits shall be obtained prior to any "Hot Work" being performed.

7.18.3. Permits can easily be obtained by contacting the Directorate of Operations Fire Protection Inspector.
Hot Work / Permits to Louis Calcagni, Garrison Safety Manager (508) 206-4020.

8. Environmental Considerations

8.1. **Waste Reduction:** Contractor shall abide by NSSC's commitment to reduce natural resource consumption and solid waste generation through resource recovery, re-use, and recycling. Integrate source reduction into all activities, to include minimizing all packing and packaging materials for items being shipped to NSSC.

8.2. **Collection and Disposal of Construction and Demolition (C&D) Waste Streams:**
8.2.1. C & D waste consists of all non-hazardous waste streams generated during construction, renovation, maintenance, repairs, and demolition projects. Waste streams include, but are not limited to the following materials: lumber, reinforcing steel and other metals, piping and wiring, concrete, brick, plaster, wall board, roofing material, insulation, plumbing fixtures, doors, windows, and asphalt. Of these materials, asphalt pavement, brick, concrete, wood, metal, glass, and clean gypsum wallboard are subject to the Massachusetts waste ban (310 CMR 19.017) and shall be segregated for recycling, reuse, or disposal in accordance with 310 CMR 19.017, no exceptions.

8.2.2. Unless otherwise specified herein, the Contractor shall provide a C&D Waste Management Plan when a roll-off or dumpster is brought onto NSSC. The waste management plan shall include a characterization of wastes to be generated (types and quantities and plans for maximizing the diversion of waste through recycling and re-use).

8.2.3. The Contractor shall achieve a minimum performance requirement of sixty (60) percent diversion for all C&D waste, by weight, from landfill disposal. It is the Contractor's responsibility to arrange collection and delivery of all C&D waste materials to the appropriate recycling center or transfer station that accepts C&D waste for the purpose of recycling.

8.2.4. A LEED Report and weight tickets for all materials salvaged, recycled, or disposed during the performance of the contact shall be provided to the COR and USAG Natick DPW-Environmental Office (Melissa Iozzo), melissa.j.iozzo.civ@army.mil, 508-206-4129.

8.2.5. NSSC security office has ultimate jurisdiction of all dumpsters (to include roll-off containers). The location and removal time-frame of all dumpsters requires approval from the government and shall be coordinated with the COR at the pre-construction meeting or a minimum of five (5) business days in advance of use of any dumpster. Dumpster locations shall also be coordinated with NSSC Department of Public Works (DPW), Roads and Grounds division, for protection of the landscape and sprinklers and to negate any impact to snow plowing. Dumpsters shall be a minimum of eighty (80'-0") from all occupied buildings. The COR shall be responsible for coordinating dumpster locations with DPW, Command Group and Security Police.

8.2.6. The Government reserves the right to retain possession of any items designated to be removed and disposed of by the Contractor.

8.2.7. All waste streams generated from any work related to this project shall be the responsibility of the Contractor to separate on site and properly dispose in accordance with the NSSC "Integrated Solid Waste Management Plan" (See Attachment 4).

8.2.8. The Contractor dumpster shall be emptied the same day it is filled to the top. The Contractor dumpster shall not have any loose debris that can be blown out by windy conditions or being moved.

8.2.9. Dumpsters shall be clearly marked with a sign showing the name of Contractor, project building and room number(s) and state "FOR CONTRACTOR USE ONLY".

8.2.10. Under no circumstances shall government dumpsters be used for disposal of any solid waste or construction and demolition waste during the contract performance period.

8.2.11. The Contractor shall actively control use of their dumpsters and shall insure that only materials from this contract get placed into the dumpsters assigned to this project.

8.3. **Collection and Disposal of Scrap Metals:**

8.3.1. Unless otherwise specified herein, the Contractor shall segregate, collect, and transport all ferrous and non-ferrous metals generated in the performance of work to the designated NSSC metal collection container (e.g., 30/40 yd^3 open top roll-off container) located behind Building #20.

8.3.2. The Contractor shall not at any time overload the scrap metal roll-off container or place objects into the container that protrude above container walls. If the scrap metal roll-off container is at or near capacity the Contractor shall immediately contact the COR and the Logistics Readiness Center (LRC) Container Control Officer for an alternate disposal location.

8.4. **Collection and Disposal of Organic/Compostable Materials:**

8.4.1. The term organic/compostable material includes: tree stumps, tree branches, grass clippings, leaves, and other vegetative matter resulting from land clearing or landscaping activities.

8.4.2. All Contractors shall achieve a performance requirement of one hundred (100) percent diversion for all organic/compostable material from landfill disposal. It is the Contractor's responsibility to arrange collection and delivery of all materials to the appropriate recycling center or transfer station that accepts organic/compostable materials for the re-purposing or reuse.

8.4.3. Contractors shall provide weight tickets (from a certified truck scale or the NSSC truck scale, located adjacent to Building 20 (west side) for all materials generated during the performance of the contact to the COR and the USAG Natick DPW-Environmental Health Office Melissa Iozzo, melissa.j.iozzo.civ@army.mil, 508-209-4129

8.5. **Storage of Hazardous Materials**

8.5.1. The storage of hazardous materials shall conform to applicable fire and safety regulations and is subject to inspection of Government personnel. Storage procedures, at the work site, shall meet all applicable environmental regulations and standards.

8.5.2. The Contractor shall maintain current Safety Data Sheets (SDS) for any of the following materials used in the performance of his work. Hazardous materials shall not be stored on the ground or open floor drain without adequate secondary containment, and shall be stored according to their compatibility.

8.5.3. All flammable material shall be stored in only approved flammable storage containers. Storage containers shall be provided at the expense of the Contractor.

8.5.4. Hazardous materials shall be limited in storage to the amount necessary to complete the contract requirements.

8.6. **Environmental Contaminate Discoveries**

8.6.1. The Contractor is responsible for contacting the COR and Contracting Officer whenever any questions arise concerning materials that may be contaminated (i.e. soils, metals, insulation, building materials etc.). Work shall be stopped until an agent from the NSSC - Environmental Health Office (EHO) is notified. The EHO will be responsible for performing all testing, storage and handling of suspected or confirmed contaminated material. The Contractor is shall be responsible for all costs associated to contamination clean up.

8.7. **Hazardous Material Spills or Releases**

8.7.1. Oil and or Hazardous Material Release Response: In case of any release of oil and/or hazardous materials (OHM) (including leaks from hydraulic hoses or equipment) at NSSC Contractor shall immediately report the release to the NSSC Directorate of Operations (DO) at (508)206-4065 and to the NSSC Environmental Health Office (EHO) at (508)206-4134 Reporting a release to DO or to EHO shall not relieve the Contractor of any other applicable reporting requirements including State and Federal laws governing reporting to USEPA or Massachusetts DEP).

8.7.2. The Contractor shall be aware that there are monitoring wells for a Superfund site in various locations on NSSC. The Contractor shall not disturb these wells and shall take extra precautions when working in the vicinity of these wells.

8.7.3. Any release to the environment of Oil and Hazardous Materials (including leaks from hydraulic hoses or equipment) as a result of Contractors work shall be the sole financial liability of the Contractor and shall be cleaned up by the Contractor at no additional cost to the Army. Should a cleanup be required, the Contractor shall conduct the cleanup in accordance with all applicable state and/or federal regulations, including but not necessarily limited to the Massachusetts Contingency Plan (310 CMR40.0000) an/or the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) or other applicable regulations. Any cleanup of oil and/or hazardous materials conducted on the installation shall be supervised by the Contractor as well as by staff of the EHO. It shall be the responsibility of the EHO to determine whether spill reporting requirements have been met and when spill cleanup is being conducted in accordance with applicable regulations, and to report this to the KO.

8.7.4. EHO staff may determine that a release of OHM has triggered a reporting threshold and may elect to report the release on behalf of the Contractor to the applicable regulatory agency in order to meet mandatory reporting time requirements. Should the EHO determine that reporting by the Army on behalf of the Contractor is required, the fact that the Army has reported the release shall not in any way relieve the Contractor of their financial liability to complete the cleanup at no additional expense to the Army. The Contractor's financial liability for completing a cleanup shall include retaining cleanup subcontractors with appropriate professional licenses and preparation and submittal of all required reports to complete waste site cleanup closure as specified in applicable regulations.

8.7.5. The Contractor shall immediately contact the EHO, when required by law, to contact the Federal, Local Environmental Agency or Occupational, Safety and Health agencies for any reason related to compliance requirements arising out of performance of this contract. In the event of any agency contacts the Contractor for any reason relating to compliance requirements arising out of this contract, the Contractor shall immediately contact the EHO and the Contracting Officer no later than the close of business on the day the contract is made. If such communication is made after regular business hours, notification shall be made immediately on the next day of business. The Contractor shall

also provide the name, telephone number of the agency, name of the person making the contact and the substance of any verbal or written communication from such agency.

8.8. **Fluorescent Lamps and Ballast**

8.8.1. All fluorescent lamps and ballast shall be recycled under the streamlined provisions of the Universal Waste Rule. Before shipping, lamps and ballasts shall be placed in protective packaging and a reputable transporter or carrier shall be contracted to transport lamps components to a receiving facility. NSSC Environmental Health Office shall sign manifest or bill of laden before waste leaves the installation.

8.8.2. All electronic ballasts can be recycled as scrap metal, non-PCB oil filled ballast shall be managed and disposed following the provisions of Universal Waste Rule, and PCB oil filled ballasts shall be managed and disposed as a Hazardous Waste. Non-leaking PCB ballasts shall be disposed in accordance with 40 CFR 761.60(b). Leaking PCB ballasts shall be disposed in accordance with 40 CFR 761.62 (a).

8.9. **Asbestos Abatement:**

8.9.1. All asbestos abatement shall be performed by an asbestos abatement Contractor licensed by the Commonwealth of Massachusetts in strict accordance with all EPA, OSHA, Local, State and Federal regulations.

8.9.2. The Contractor shall notify all necessary Local, State and Federal agencies before start of work.

8.9.3. A detailed asbestos abatement plan of work procedures for the demolition and removal of all materials containing asbestos shall be submitted before work can begin. The plan shall be prepared and signed, including certification number and date, by a certified industrial hygienist. This plan shall be approved by the COR or assigned representative appointed by the COR, prior to start of any work. The approved plan shall be strictly followed.

8.9.4. Air monitoring is required before, during and after abatement. A monitoring and air clearance plan shall be prepared and signed by a certified industrial hygienist. This clearance plan shall include a certification number and date. This plan shall be approved by the COR or assigned representative appointed by the COR, prior to start of any work.

8.9.5. Decontamination of the space and monitoring for final air clearance is required before the space can be occupied by anyone other than licensed asbestos abatement Contractors.

8.9.6. Area shall be sealed tight in accordance with the requirements and all penetrations shall be filled in with fire stopping or other appropriate material in advance of the work to prevent migration to adjacent floors.

8.9.7. Upon completion of work specified, pertinent documentation shall be forwarded to COR. This documentation includes: a Disposal Manifest, asbestos abatement notification and analytical results of air samples conducted during and following abatement.

8.10. **Green Procurement:**

8.10.1. All supplies and materials shall be of a type and quality that conform to applicable Federal specifications and standards and, to the extent feasible and reasonable, include the use of green products. All supplies, materials, and equipment to be used in the performance of work described herein are subject to approval of the COR/COTR (Contracting Officer's Technical Representative).

8.10.2. The Contractor shall not use any materials, chemicals, or compounds which the COR/COTR determines would be unsuitable for the intended purpose or harmful to the surfaces to which applied or that contain Class 1 ozone-depleting substances or EPA-listed priority chemicals.

8.10.3. The Contractor shall utilize and give priority to products made from bio-based materials, particularly for U.S. Department of Agriculture (USDA)-designated products (www.biopreferred.gov) and products made from recovered materials, particularly for EPA-designated products (www.epa.gov/cpg) in accordance with Federal requirements without jeopardizing the intended end use or detracting from the overall quality delivered to the end user.

8.10.4. The Contractor shall indicate in writing (e.g., work plan or design document) how, at a minimum, it shall conform to the Comprehensive Procurement Guidelines (CPG) and Recovered Materials Advisory Notices (RMAN) published by EPA (www.epa.gov/epawaste/conserve/tools/cpg/pdf/consolrman.pdf) with respect to recovered material products, and bio-based recommendations published by USDA.

9. Preconstruction Meeting/Periodic Progress Meetings:

9.1. The Contractor shall attend pre-construction meetings and other meetings convened by the Contracting Officer as needed to maintain contract conformance.

10. Personnel Requirements / Contractor Labor Hour Reporting:

10.1. The following personnel are considered key personnel by the Government: Site Supervisor. The Contractor shall provide a Site Supervisor who shall be responsible for the performance of the work. The name of this person and an alternate (if chosen by the Contractor) shall be provided in writing to the COR. The Site Supervisor shall have full authority to act for the Contractor on all contract matters relating to daily operation of this contract. The Site Supervisor shall be available while Contractor is working on site Monday through Friday except Federal holidays or when the Government facility is closed for administrative reasons.

10.2. The Contractor shall employ ample personnel and sufficient equipment to accomplish the work of this contract in the least amount of time, within the performance period specified in Section 3.1 of this SOW. Should the Contractor fail to maintain a satisfactory rate of progress in accordance with the Contractor's approved progress schedule, the Contracting Officer may require that additional personnel and equipment be placed on the work and weekend and overtime work be performed, in order that the work be brought up to schedule and maintained.

10.3. The Contractor shall be licensed as a General Contractor within the state of Massachusetts. All Subcontractor's performing work shall be licensed for their respective discipline within the state of Massachusetts.

10.4. The Contractor's Site Supervisor shall be on site at all times while work is being performed to ensure quality control and safety of all persons. The Contractor shall provide the name and contact information (cell phone, email address) of the Site Supervisor to the COR.

10.5. If a Site Supervisor is to be substituted by an acting job supervisor, the Contractor shall be responsible for providing the acting job supervisor with a complete SOW, construction drawings and any other necessary information, such as the name and contact information of the COR, and make sure that the substitute supervisor has a thorough and complete knowledge of the project, all safety requirements and NSSC/DPW procedures.

10.6. The Contractor shall report ALL Contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for USAG Natick via a secure data collection site. The Contractor is required to completely fill in all required data fields using the following web address: http://www.ecmra.mil/ Reporting inputs shall be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year, beginning with 2013. Contractors may direct questions to the help desk at help desk at: http://www.ecmra.mill.

11. Utilities:

11.1. The Contractor shall contact DIGSAFE 1 (800) 344-7233 to mark underground utilities prior to any excavation. DIGSAFE does not mark all utilities, only public utilities on the installation. The Contractor shall verify the plan location and elevations of all existing underground utilities, in the work area before commencing excavation. Use only utility and site drawings provided by the Government; and verify with the COR prior to excavation. See Section 10.15 for more information.

11.2. The Contractor shall be responsible for coordinating any utility shut-downs with written approval by the COR, a minimum of ten (10) business days in advance and include at least one alternative date. A request form for utility shut downs will be provided. Shut downs will be held to a minimum amount of time and shall be arranged for at the convenience of the Government and may have to be scheduled outside the regular working hours or on weekends. This work shall not require additional services or fees. Services shall not be interrupted until receipt of approval of proposed hours and dates are received from the Contracting Officer.

11.3. All utility tie-ins performed by the Contractor shall be performed in the presence of the COR and an NSSC Operations and Maintenance designated technical representative. All utility tie-ins shall be acknowledged in writing by all three parties to be in compliance with the contract documents and specifically note that there are no unintended 'cross-connections' with the NSSC potable water supply. Tie-ins will be treated in the same manner as a shut-down for advanced notice, hours of operation, fees and service interruption.

11.4. The Contractor shall have a contingency plan for potential damage when excavating for utility work. Locate shut-off valves for all known underground utilities that could be disturbed and who and what may be impacted and how in the event of unplanned utility interruption. The Contractor shall have temporary patches, materials, tools, equipment and personnel on site for utilities with high risk potential for damage within means determined feasible for the contract. Plan should involve coordination of engineering disciplines with respective utilities, DPW and Contractor.

12. Emergency Services:

12.1. The Contractor shall have competent personnel trained and capable of dealing with minor personnel injuries. Contractor personnel shall immediately notify their supervisor of any accident requiring emergency medical treatment. Contractor shall, in turn, notify the KO or COR within thirty (30) minutes of the incident.

12.2. Emergency medical treatment and services for Contractor personnel is the responsibility of the Contractor. The Contractor shall call 508-206-5911 (Police Desk) for medical assistance or other emergencies requiring assistance.

13. Project Completion:

13.1. Upon completion of the project, the Contractor shall thoroughly clean all work areas to be free of all dust and debris for all areas impacted by demolition and construction. The Contractor shall contact the COR within twenty-four (24) hours after total completion of the project for evaluation of the site conditions by the COR or an authorized representative. The COR may request additional work to satisfy the criteria of this provision or approve the cleanliness of conditions at completion.

13.2. The Contractor shall warranty all work within this SOW and all contract documents during the performance of the project for a period of one (1) year, beginning on the date that the project is determined to be complete. The

determination of the completion date shall be indicated by the COR as the final invoice acceptance date unless otherwise stated in writing by the COR as the accepted substantial completion date.

13.3. The Contractor shall submit all product manufacturer's standard performance guarantees and/or warranties upon completion of all work and prior to final payment.

13.4. The Contractor shall submit one (1) set of 24" x 36" as-built record drawings showing final conditions of the project.

13.4.1. The Contractor shall submit as-built record drawings in REVIT 2017 or AutoCAD version 2017 if work is not completed in REVIT. ACAD and REVIT drawings issued for bid can be requested for as-built editing unless they contain secure documents or portions of documents that can't be redacted. Versions of REVIT or ACAD shall be capable of retaining all information in documents provided for bid to remain and shall be no later than eight (8) years old unless approved in writing by COR.

13.4.2. As-built drawings shall contain, but not limited to, the following information:

13.4.2.1. Actual location, type and size of all sub-surface utility lines. Locate valves, splice boxes and similar appurtenances by dimensioning along the utility run from a reference point. Record the average depth below the surface of each run.

13.4.2.2. The location and dimensions of any changes within the building structure.

13.4.2.3. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

13.4.2.4. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

13.4.2.5. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

13.4.2.6. Changes or modifications which result from the final inspection.

13.4.2.7. Final As-built AutoCAD or Revit drawings as compatible, stamped by an architect or professional engineer for correctness of all changes made to drawings are required. All changes to contract drawings shall have a numbered revision cloud keyed to the drawing Action title block same number with brief description of field change with date drawing revision is made. As-built drawings (AutoCAD or Revit and PDFs of the same size of drawing) shall be provided to the government by DoDSafe File Transfer and shall be submitted to government COR at the end of the project, prior to final payment. Final As-built drawings shall be submitted within the following timeframes (after project final punch-list is complete and space is turned over to the government) based on total awarded contract value: Less than or equal to $1M = 30 days; Greater than $1M and less than $5M = 45 days; Greater than $5M = 60 days. The Government shall review and provide comments back to the Contractor within 10 business days. The Contractor shall make any and all corrections and submit to COR within 10 business days.

14. General Notes

14.1. Site visit(s) are strongly encouraged prior to bidding project.

14.2. The Contractor shall attend a pre-construction meeting with key Contractor personnel, the Contracting Officer and COR. The purpose of the conference is to review contract requirements and to establish a working relationship between the Contractor's Staff and the members of the DPW and NSSC staff who will be closely associated with the project. During the conference, the Contracting Officer will inform the Contractor concerning Job Safety, Quality Control, Labor Relations, and Environmental Protection. The Contractor's Superintendent, Quality Control Representative, and Site Safety and Health Officer (SSHO) shall attend this conference and review schedule, safety and processes including communication protocol.

14.3. The Contracting Officer (KO) may designate a Contracting Officer's Representative (COR) or Contracting Officer's Technical Representative (COTR) to this project. The COR shall be the primary point of contact (POC) for all matters regarding this project.

14.4. All dimensions and figures listed in SOW, drawings and any other contract documents are approximate and determined to be as close as possible. Do not measure distances or sizes from drawings. Use the written information or field measurements.

14.5. The Contractor shall verify all dimensions and information necessary to perform all work prior to submitting proposal.

14.6. RECORD DRAWINGS: The Contractor shall maintain at the jobsite one set of full-size contract drawings marked to show all deviations which have been made from the contract drawings, including buried or concealed construction and utility features revealed during the course of construction. Record the horizontal and vertical location of all buried utilities that differ from the contract drawings. These drawings shall be available for review by the Contracting Officer at all times. Contractor requested instruction or deviations to the contract documents shall be submitted in writing with a RFI (Request for Information) and responded to with directives/approval by the Government. Field change mark-ups to the jobsite set of prints for all field changes shall include pertinent information collected, document requirement for change and be a continuing process during the life of the contract. Upon completion of the work, submit the original marked set of prints to the Contracting Officer for approval. Requests for partial payments will not be approved if the marked prints are not current to cover the work being invoiced. In the case of approved RFI changes, revised drawings or documents reflecting directives/approved changes will be issued by the Contracting Officer. The Contractor shall make copies sufficient to insert the revised prints into all field drawing sets, replacing the superseded drawings and all other applicable notations previously made on the superseded drawings transferred to the current prints. Carefully prepared sketches, not less than 8-1/2" x 11", may be used to depict changes or added information in lieu of notations on the actual prints. Staple sketches to the prints affected by the change. All plan views, sections, elevations, profiles, diagrams, details, or schedules affected by a change shall be marked up as required to reflect the change. All notations or changes made on the prints shall be in sufficient detail to clearly depict the change. Colored pens or pencils shall be used to make notations on the record prints. Final As-built drawings shall reflect all changes electronically as outlined in previous section of this SOW. Request for final payment will not be approved until the marked prints or revisions are shown on as-built drawings and submitted to and approved by the Contracting Officer.

14.7. The Contractor shall field verify all dimensions prior to fabrication of any materials to be installed.

14.8. The Contractor shall verify that all materials bid shall be in stock and readily available.

14.9. The Contractor shall be responsible for reporting any and all errors, omissions and/or discrepancies between the drawings, SOW and field conditions to the COR prior to commencing with the effected work.

14.10. If there are any discrepancies, conflicts, errors, and/or omissions between SOW, drawings, other contract documents and field conditions the Contractor shall be responsible for reporting any and all to the COR prior to submission of a bid, before contract is awarded, and in advance of commencing the work impacted by such faults.

14.11. All items included in this SOW and all other documents associated with this work shall be the responsibility of the Contractor to purchase, deliver and install unless noted otherwise such as: "Government furnished", "by others" or "by owner".

14.12. All items included to be demolished, shall be the responsibility of the Contractor to remove and dispose of, unless specifically noted otherwise.

14.13. All work shall conform to all applicable codes, governing regulations and associated references to include but not limited to the Uniformed Federal Criteria (UFC) and other codes as referenced by the UFC including the International Code Council, Architectural Barriers Act (ABA), Massachusetts Building Code, NFPA Life Safety Codes, Environmental Protection Agency (EPA), National Electrical Code, Plumbing, etc.

14.14. Do not demolish or cut communications equipment and wiring unless specifically noted to do so.

14.15. The Contractor shall control all dust and odors at all times from affecting adjacent areas not involved with the project using control measures approved by the COR. Provide dust barrier and seal tight around all doors to corridors and over all HVAC and other possible penetrations to adjacent occupied and unoccupied areas. Typical control measures involve erecting temporary barrier walls, venting dust and odors to the exterior, vacuuming dust completely and in some cases HEPA filters. Noise shall be kept to a minimum. Loud noise shall be attenuated i.e. insulation, when adjacent occupied spaces are on same floor or exposed by openings to another floor. The Contractor shall notify the COR in advance of all such conditions for inspection of control measures taken prior to performing associated work. When necessary, arrangements can be made to perform this type of work after normal business hours at no additional expense to the government unless work is clearly not included in this SOW.

14.16. The Contractor shall, at the end of each day, inspect the facility (interior & exterior) for impacts from the work and thoroughly clean the job site and immediate surrounding areas.

14.17. The Contractor shall clean all visible dust, dirt and debris upon job completion. The Contractor shall remove and properly dispose of all waste/debris generated from demolition and construction, off post, as necessary to maintain a safe work environment throughout the performance period and at job completion.

14.18. Throughout the course of this project caution tape and safety warning signs shall clearly mark all construction areas where the potential exists for personnel not involved with the construction to enter or pass. When it is necessary for non-construction personnel to pass through a construction area, flag persons shall be posted at all key points to ensure the safety of the non-construction personnel, particularly during construction operations that pose a potential threat to safety.

14.19. The Contractor shall be responsible for protecting and avoiding damage to the project site and surrounding areas and shall carry appropriate comprehensive/liability insurance coverage to account for possible damage and lost items. Any damage to the Project work area, exterior, interior or surroundings resulting from the Contractor's actions or equipment shall be the responsibility of the Contractor to repair or replace as determined by the COR. If any other existing building, road conditions, sprinkler system, lawn, landscape etc. are damaged, it shall be the responsibility of the Contractor to restore by matching the existing conditions in materials, dimensions, appearance and integrity as accurately as possible. Any damage to lawn areas shall be replaced with sod and maintained by Contractor until lawn/sod has been reestablished. A satisfactory match will be determined by the COR. If repairs cannot be made by the Contractor, the cost of the repairs will be determined by the KO and appropriate compensation shall be made by the Contractor, payable to the U.S. Treasury.

14.20. The Contractor shall maintain a safe, orderly and reasonably clean work environment throughout the performance period and is subject to unannounced OSHA and NSSC inspections.

14.21. The Contractor shall remove all packing & installation materials, equipment and tools upon completion of each individual job task.

14.22. Grounds and Storage are limited at NSSC and no assumption of storage, International Standards Organization (ISO) storage containers placement, or parking trailers on NSSC shall be made by the Contractor. The contractor shall submit a request for placement of all ISO storage containers, dumpsters, trailers, Port-O-Potty's and equipment from the Installation Master Planning Chief via COR and obtain written approval in advance of placement. Permissions will be granted on a case by case basis. The contractor is responsible for attaching a legible sign that is clearly visible with his/her contact information to all approved items. Any and all items in violation of this mandatory protocol are subject to removal by the government at the contractor's expense.

14.23. During this contract, other Contractors or Government workers may be performing operations in the general area where work under this contract is being performed. No cost or scheduling impacts are anticipated. The Contractor shall cooperate with others in all respects wherever necessary and immediately bring any potential conflicts that may impact schedule or costs to the KO's attention.

14.24. Noise shall be kept to a minimum. The Contractor shall notify the COR at least two (2) days in advance of all such conditions for inspection of the control measures taken prior to performing associated work. Arrangements can be made to perform this type of work after normal business hours at no additional expense to the government unless the work is clearly not included in this SOW.

14.25. The Contractor shall fire-stop all new penetrations through walls and floors including but not limited to plumbing, mechanical, electrical, communications/data, structural, fire protection/alarming, sound masking and security systems, etc. as required by building, life, safety and health codes and/or SOW and associated contract documents. All openings left as a result of the removal of piping, conduit and ductwork from plumbing, mechanical, electrical or other utility to be removed based on the demolition shall be infilled or fire-stopped as required by code.

14.26. When applicable to the scope of the project for required equipment, the Contractor shall have sufficient (min of 5 years) successful experience performing the work as specified in contract documents. Also, as applicable to the trades required within the scope of the project the Contractor's installers shall be in possession of the following MA State Licenses/Certificates: Sheet Metal Installer's Certification; Electrician; Plumber's & Gas Fitter and Confined Space Certification. Copies of licenses and certificates shall be submitted to the KO no later than five (5) days after contract award.

14.27. The Contractor shall be responsible for snow removal in their assigned exterior work area(s).

14.28. Painting:
14.28.1. All paint shall be by "Benjamin Moore" or approved equal. All interior paint shall be zero or low VOC (Volatile Organic Compounds). The Contractor shall submit color samples to COR for Government selection and approval.

14.28.2. Preparation:
14.28.2.1. General: Remove hardware, hardware accessories, plates, machined surfaces, surface mounted fixtures, and similar items already installed that are not to be painted. If removal is impractical, protect all exposed surfaced prior to painting. After completing painting operations reinstall items removed and remove all protective coverings.

14.28.2.2. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.

14.28.2.3. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and/or as specified herein.

14.28.3. Application:
14.28.3.1. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

14.28.3.2. Gypsum Board: Apply one (1) coat of ECO SPEC WB latex primer (N372) and two (2) coats of ECO SPEC WB eggshell acrylic finish (N474). Benjamin Moore products or approved equal. Color to be selected by Government.

14.28.3.3. Concrete Masonry Units (CMU): Apply one (1) coat of SUPER SPEC MASONRY Interior/Exterior Acrylic Masonry Sealer (N066) and two (2) coats of ECO SPEC WB eggshell acrylic finish (N474). Benjamin Moore products or approved equal. Color to be selected by Government.

14.28.3.4. Interior Wood: Apply one (1) coat of ECO SPEC WB latex primer (N372) and two (2) coats of ECO SPEC WB semi-gloss acrylic finish (N476). Benjamin Moore products or approved equal. Color to be selected by Government.

14.28.3.5. Ferrous Metal (Exterior Doors): Apply one (1) coat of SUPER SPEC HP acrylic metal primer (P04) and two (2) coats of MOORGARD acrylic low lustre finish (N103). Benjamin Moore products or approved equal. Color to be selected by Government.

14.28.3.6. Non-Ferrous Metal: Clean surfaces with Super Spec HP Oil & Grease Emulsifier (P83). Apply two (2) coats of MOORGARD acrylic low lustre finish (N103). Benjamin Moore products or approved equal. Color to be selected by Government.

14.28.3.7. PVC (Polyvinyl Chloride) Trim: Apply two (2) coats of Resilience Exterior acrylic latex paint (K42 Series) by Sherman Williams or approved equal.

17.29. Heating, Ventilation and Air Conditioning (HVAC)

17.29.1. All air duct smoke detectors required by codes, standards, and the National Fire Protection Association (NFPA) must be maintained operational and be wired as to automatically stop the fan(s) on detecting the presence of smoke. Whenever work is performed on any existing HVAC system that affects the automatic stop of the fan(s) in conjunction with a duct smoke detector, a qualified electrician as defined in NFPA 70 the National Electrical Code, shall ensure the automatic shut off is properly wired and tested. The HVAC contractor shall be responsible for contracting with Johnson Controls (base-wide Simplex fire alarm system), for proper wiring circuit requirements, any interface devices required to tie into the fire alarm equipment, and testing of the work. All work shall be coordinated with the Garrison's Fire Protection Inspector.

17.29.2. All new HVAC return grilles shall be white aluminum as manufactured by 'Titus' TDC or approved equal. Refer to drawings or specifications for neck size.

17.29.3. All new HVAC controls software & hardware shall be Carrier's open protocol CCN / I-VU to ensure fully operable system with Natick's Central Control System.

17.29.4. All new thermostats shall be programmable heating/cooling thermostat with visual temperature indication and adjustable dead bend (+/- 2 degrees) as manufactured by Carrier, Carrier Intelligent Space Sensor, Type ZS Pro, Model ZSP-CAR (compatible with Carrier's open protocol CCN / I-VU system) or approved equal.

17.29.5. The Contractor shall provide emergency outside air intake shut-off as follows: low-leakage motorized control damper shall be installed on every outside air intake. Automatic shutoff switch shall also be installed in common adjacent area not far from the respective HVAC units and connected to the outside air intakes. Switch activation shall close these dampers, leading to the outside, within 30 seconds. Outside air intakes shall be located at least 10 feet above finish grade/surface, whichever is higher.

17.30. Electrical:

17.30.1 All electrical equipment shall be installed in accordance with the current edition of the National Electric Code & in accordance with all army regulations. The sizes and ratings of the electrical equipment (breakers, switches, conduit, conductors, etc.) required shall be determined by the equipment manufacturers' instructions, and shall fully comply with the current edition of the National Electrical Code (NEC). Current edition of the NEC is defined as the latest edition at the time of project award.

17.30.2. All electrical equipment shall be installed in a neat and workmanlike manner (as defined by the NEC and described by ANIS/NECA) and in coordination with other trades.

17.30.3. The panel schedule shall be updated after completion of work. One copy of the panel schedule shall be left in panel board and one given to the DPW Electrical Engineer. All breakers within scope shall be labeled to reflect the updated panel schedule. All outlets, switches, and circuit end points within scope shall be labeled with the panel name and circuit number that they are feed from.

17.30.4. All work shall be done in strict accordance with the current edition of the national electrical code, OSHA regulations and technical requirements listed under the electrical portion of this contract. All materials and equipment shall be installed in accordance with recommendations of the manufacturer as approved by the contracting officer's representative to conform to the contract documents. The installation shall be performed by an electrician licensed in the commonwealth of Massachusetts. All material shall be UL listed for proposed use.

17.30.5. All wires shall be copper stranded type THHN/THWN unless otherwise noted. Minimum wiring shall be copper #12 AWG except where noted, conduit shall be ¾" EMT, as a minimum except where noted. Aluminum wire is not allowed.

17.30.6. All switches, receptacles and plugs shall be specification grade except where noted.

17.30.7. No wiring shall be type nm or "Romex".

17.30.8. MC Cable, where used, shall be anchored per electric codes.

17.30.9. All wiring shall be THHN/XHHN/THWN insulation, rated 600vac and shall be sized per NEC and manufacturer's recommendations, using 90 degree c column, in table 310-16, unless otherwise noted. In no case shall the wiring be rated less than the circuit breaker rating feeding the equipment.

17.30.10. All buss bars shall be copper. All breakers shall be bolt on. All buss bars and breakers shall have a minimum ISC rating of 22kA. Branch breakers for HVAC equipment shall also be HACR rated.

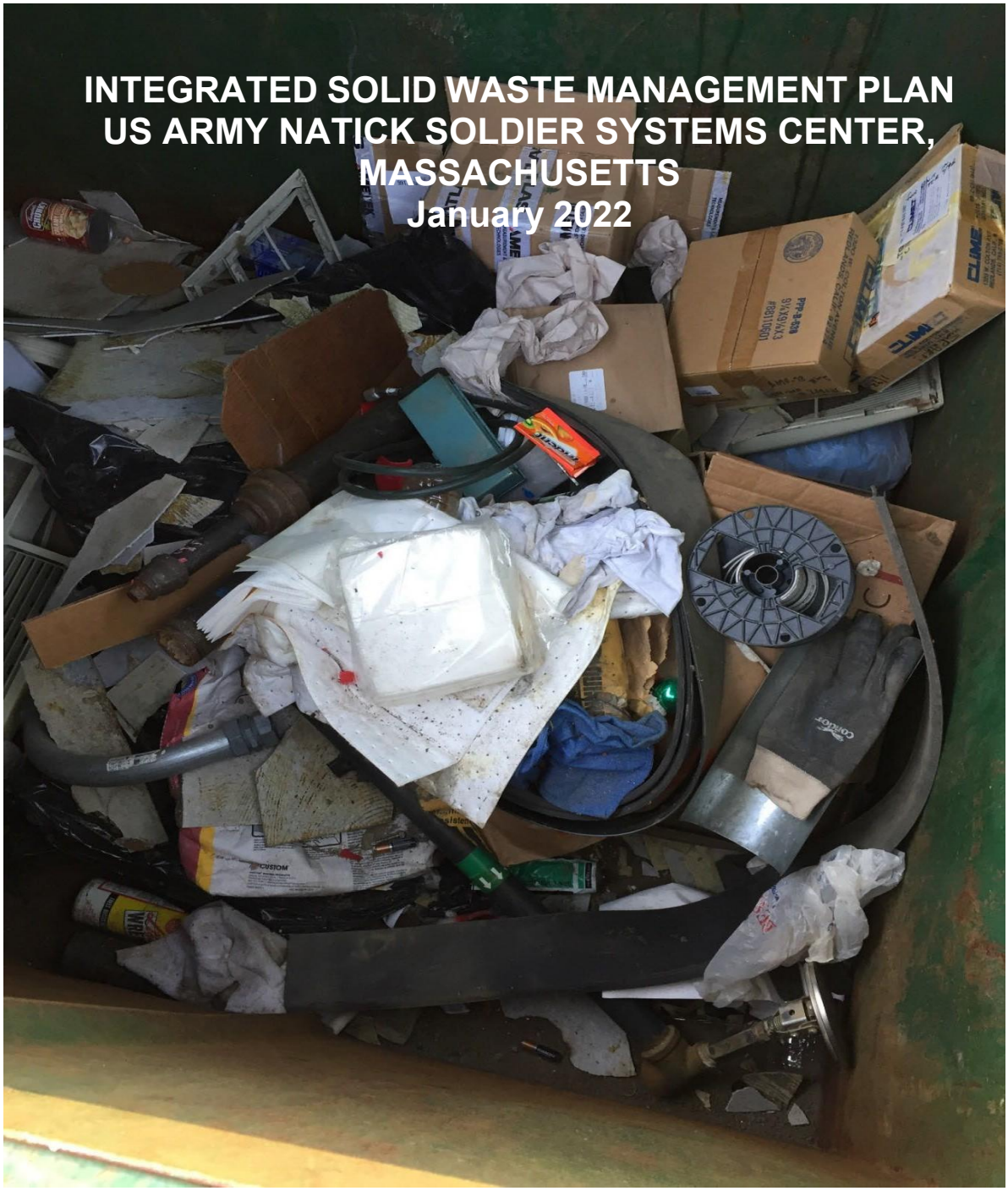
17.30.11. Electrical work that will impact buildings, occupants, or equipment shall be coordinated with the KO, the COR, and the DPW electrical engineer two (2) business days in advance.

17.30.12. All wires, conduit, raceways, and other circuit paths shall be concealed unless directed otherwise.

17.30.13. All new circuits/circuit breakers/conductors shall be a minimum of twenty (20) amp circuits.

17.30.14. Any penetration through existing corridor walls or ceiling by new conduit shall be appropriately sealed and fire stopped.

Attachment 2 – Integrated Solid Waste Management Plan



INTEGRATED SOLID WASTE MANAGEMENT PLAN
US ARMY NATICK SOLDIER SYSTEMS CENTER, MASSACHUSETTS
January 2022

Distribution authorized to U.S. Government Agencies only; protection of privileged information evaluating another command: June 16.
Requests for this document must be referred to Commander, U.S. Army Soldier Systems Center, AMIM-SSG-ZA, Natick, MA 01760-5002

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INTEGRATED SOLID WASTE MANAGEMENT PLAN
U.S. ARMY SOLDIER SYSTEMS CENTER

1.0 PURPOSE AND OBJECTIVES

The purpose of this Integrated Solid Waste Management Plan (ISWMP) is to document U.S. Army Natick Soldier Systems Center (NSSC)'s current solid waste management requirements and practices, identify goals for solid waste minimization and diversion, and specify the approach for achieving those goals. The plan identifies various elements and quantities of the waste stream; identifies the current practices for reuse, recycling, and disposal of solid waste. This ISWMP applies to all current and future NSSC directorates, tenants, and activities.

The objectives of the solid waste management program at NSSC are stated below.

- Minimize the generation of solid waste through source reduction
- Reuse, repurpose, or recycle elements of the solid waste stream to the maximum extent practicable
- Divert construction and demolition (C&D) waste to the maximum extent practicable, with the goal of diverting 60% C&D annually in accordance with the Department of Defense (DOD) Strategic Sustainability Performance Plan (SSPP) (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSDATL), 2016a)
- Divert at least 50% of nonhazardous solid waste (excluding C&D waste) annually (OUSDATL, 2016a)
- Strive to meet the goal of *Net Zero Waste* in accordance with Army Directive 2014-02 (SECARMY, 2014).
- Comply with all applicable Federal, Commonwealth of Massachusetts, local and Army solid waste management regulations including applicable Executive Orders (EOs)
- Effectively manage solid waste in a manner protective of human health and the environment.

2.0 BACKGROUND

2.1 Location.

NSSC is located on 74 acres in the town of Natick, approximately 17 miles west-southwest of Boston, Massachusetts. The main campus is located on a point of land protruding into Lake Cochituate in the Town of Natick. The main campus is a 78-acre, military property containing nearly 80 buildings including laboratories; administrative offices; an infirmary; a textile research center; environmental test chambers; drop test facilities; and laser, thermal, and ballistic test facilities. A cafeteria, enlisted housing and mess, barbershop, credit union, and recreational facilities are also located on site. The housing areas in Needham, Wayland, and Hudson have been divested, only the Heritage Lane and General Greene Drive housing areas in the Town of Natick will remain. In total, NSSC supports a civilian and military population of approximately 1,600 personnel.

2.2 Scope and Applicability.

Solid waste, as defined in the Resource Conservation and Recovery Act (RCRA), is any garbage, refuse, sludge, or other discarded material resulting from industrial, commercial, institutional, and residential activity. Discarded materials include those disposed, abandoned, recycled, or inherently waste-like. Hazardous wastes are solid wastes that meet specific RCRA criteria involving hazardous characteristics or the presence of listed constituents and are not addressed in this ISWMP. This plan applies to the entire NSSC including tenant organizations, which include the following organizations:

- U.S. Army Research Institute of Environmental Medicine (USARIEM)
- U.S. Army Integrated Logistics Support Center(ILSC)
- U.S. Navy Clothing and Textile Research Facility (NCTRF)
- U.S. Army Soldier Research, Development, and Engineering Center (DEVCOM)
- U.S. Army Project Manager Soldier Equipment (PMSE)
- U.S. Army Project Manager Force Sustainment Systems (PMFSS)
- U.S. Coast Guard Clothing Design and Technical Office
- U.S. Army Contracting Command – Natick Contracting Division (NCD)
- U.S. Army Sustainment Command – Logistics Readiness Center (LRC)

2.3 Mission.

It is NSSC's mission to protect and sustain America's military forces. NSSC is responsible for the technology, research, development, engineering, fielding, and sustainment of the military's food, clothing, shelters, airdrop systems, and Soldier support items. NSSC also has the lead for Soldier integration for the U.S. Army.

2.4 Army Net Zero Waste Strategy.

This ISWMP reflects the U.S. Environmental Protection Agency (EPA) pollution prevention (P2) hierarchy, which emphasizes source reduction and recycling to reduce the solid waste stream. The Army Net Zero Waste strategy expands on the P2 hierarchy, and identifies five elements of waste management in order of preference: source reduction, repurposing, recycling/composting, energy recovery, and disposal. This is similar to the P2 hierarchy in that emphasis is placed on reducing waste at the source, followed by ways to transform wastes into new products or recover energy. An Army Directive issued in January 2014 sets policy and assigns responsibilities to strive toward Net Zero at all Army installations (SECARMY, 2014).

3.0 REGULATORY REQUIREMENTS AND POLICIES

The NSSC solid waste management practices have been developed based on legislation enacted by the Commonwealth of Massachusetts, U.S. Congress, EOs signed by the President, and directives and instructions issued by the DOD and the Army. A summary of relevant laws, EOs, and other policies is provided in Appendix B.

4.0 RESPONSIBILITIES

The responsibilities of key participants in NSSC's solid waste management program are as follows.

4.1 Garrison Commander.

- Provide command emphasis on solid waste reduction, materials reuse, recycling, and green procurement (GP).
- Approve and promulgate the NSSC ISWMP.
- Maintain a functional organizational structure to plan, execute, and monitor the solid waste management program.
- Promote participation in the installation's recycling program (Appendix C NSSC Policy Statement No. 07-2022 Natick Recycling and Waste Reduction).
- Participate on the Environmental Quality Control Committee (EQCC), the forum that addresses environmental issues including solid waste management and recycling.

4.2 All Directors and Tenant Activity Leadership.

- Advise staff activities of Federal, Commonwealth, and DOD requirements for managing and reducing solid wastes and recycling.

- Monitor activities regarding compliance with solid waste management requirements.

- Support and emphasize the practices of waste reduction, reuse of materials, recycling, and GP.

- Participate in the EQCC.

4.3 Director of Public Works.

In addition to the responsibilities listed in paragraph 4.2, the Director of Public Works is responsible for the following:

- Program, budget, and defend resource requirements to manage the solid waste program. This includes funds for personnel, equipment, studies, operation, maintenance, treatment, storage, disposal, waste minimization measures, promotion, and training.

- Ensure that all new contracts awarded, particularly C&D contracts, include contract language stipulating the diversion of recyclable materials when feasible and cost-effective to the Government

- Additionally, ensure that C&D contracts specify that contractors submit C&D waste management plans and waste diversion data.

- Ensure that new construction and major renovations conform to applicable building energy efficiency requirements and sustainable design principles as specified in EO 13834.

4.4 Natick Contracting Division.

In addition to the responsibilities listed in paragraph 4.2, the Contracting Division is responsible for ensuring that contracts meet Federal GP requirements and source reduction strategies as follows:

- Ensure that contracts have appropriate clauses for source reduction and recycling, GP, and C&D waste.

- Require the use of environmentally preferable products where applicable, with emphasis on mandates for recovered materials, biobased products, and energy efficiency.

- Stipulate in contracts that paper products contain 30% recycled content at a minimum and that contractor documents be printed double-sided.

- Modify solid waste and recycling contracts as necessary to support installation solid waste management planning efforts.

- For construction, demolition, and renovation contracts, include provisions for quantifying and reporting the materials diverted from the waste stream and ensure measures for the salvaging, reuse, and recovery of materials are incorporated by requiring contractors to provide and follow a C&D waste management plan (see section 8.2.3 for additional details).

4.5 Chief, Environmental Office.

- Identify a person(s) responsible for managing the solid waste program and the recycling program. The Solid Waste Manager may also be designated to assume any or all of the responsibilities listed below.

- Serve as the Commander's expert representative for the management of solid wastes. Advise the Commander on the most cost-effective and efficient means of storing, treating, and disposing waste, and modifying equipment or procedures if needed. Recommend changes in policies or procedures to improve program management to the Commander when necessary.

- Ensure sufficient funding levels to comply with regulatory requirements and support waste reduction initiatives.

- Ensure that the Environmental Office staff conducts compliance audits, to include solid waste and recycling, of all units, organizations, and tenant activities.

- Ensure that the ISWMP is updated every 5 years at a minimum or as necessary to reflect current solid waste handling and disposal practices.

- Promote and implement GP strategies.

- Report to the EQCC on a quarterly basis on issues related to solid waste management and recycling.

4.6 Solid Waste Manager.

- Serve as the Environmental Office Chief's expert on integrated solid waste management issues including waste reduction and recycling.

- Coordinate with Solid Waste Contracting Officer's Representative (COR) on all aspects of the integrated solid waste management program including source reduction, recycling, reuse, and disposal methods.

- Periodically review all applicable Federal, Commonwealth, and Army

requirements for managing solid wastes and advise all waste-generating activities of the requirements including requirements for reporting and recordkeeping. Monitor installation compliance with Federal, Commonwealth, and Army solid waste management requirements.

- Determine the most cost-effective and efficient means of source reduction, recycling, and waste collection, storage, treatment, and/or disposal. Seek out and propose more efficient, cost-effective methods of integrated solid waste management when applicable.

- Request, justify, and procure equipment necessary to perform solid waste and recycling operations.

- Review contracts related to solid waste management and recycling for environmental compliance.

- Maintain liaison and coordinate as necessary with Federal and Commonwealth solid waste regulators.

- Collaborate with Town of Natick Sustainability Coordinator (or officials) toward future co-operative agreements for solid waste collection services.

- Create and maintain a recordkeeping system to track materials diverted and disposed. Track solid waste and recyclables quantities and submit appropriate data into Solid Waste Annual Reporting System Web-based (SWARWeb) database (or the successor module in the new enterprise business system, the Headquarters Army Environmental System).

- Serve as the installation point of contact for questions, complaints, or other information regarding recycling.

- Implement an active educational and promotional program for waste reduction and recycling practices. Work with the Public Affairs Office to ensure the recycling program and procedures are publicized.

4.7 Contracting Officer Representative for the Solid Waste Contract.

- Serve as the installation point of contact for questions, complaints, or other information regarding solid waste management and contractor performance.

- Periodically review the number and location of dumpsters and ensure pickup schedule is adequate and efficient.

- Coordinate with the Solid Waste Manager to develop strategies for improvements in integrated solid waste management and, if necessary, modify contracts to implement those strategies..

- Closely monitor weight slips generated by the solid waste services contractor; verify that weight information corresponds with monthly Wide Area Work Flow invoice payments.

- Identify the solid waste and recycling activities that are carried out by contract, review the responsibilities, and monitor the performance of the contractor.

- Ensure contract provisions are fully executed, and take appropriate actions when found to be deficient.

- Require contractors disposing of C&D waste to report the quantities of C&D waste diverted from the landfill disposal (referred to as Leadership in Energy and Environmental Design (LEED) reports).

4.8 Logistics Readiness Center.

In addition to the responsibilities listed in paragraph 4.2, the Logistics Readiness Center is responsible for the following:

- Actively support the DPW Environmental Office in measuring progress to meet Federal and DOD waste reduction goals and GP requirements.

- Complete and submit DD FORM 1348-1A's to the Solid Waste Manager for materials turned into the DLA Disposition Service activity serving the installation.

4.9 Public Affairs Office.

- Publish promotional material on solid waste management issues as provided by the DPW Environmental Office.

- Use a variety of media to maximize the audience reached.

4.10 Environmental Quality Control Committee.

- Meet quarterly and discuss issues on the meeting agenda including solid waste management and the implementation of this ISWMP.

- Provide a forum for planning, identifying needs and objectives, and coordination among various installation entities.

4.11 All Organizations, Units, and Tenant Activities.

- Participate in and support the recycling program by identifying, collecting,

separating and placing recyclables into the proper bins, breaking down cardboard boxes, and removing contaminants from all potentially recyclable materials.

- Reduce the amounts of solid waste generated through procurement of products with recycled materials content and/or less or reusable packaging, buying only the amounts needed, seeking and implementing new recycling and reuse procedures, and altering operations to reduce wastes.

5.0 SOURCE REDUCTION

Source reduction (i.e., creating less waste) is the preferred management method for reducing the volume of solid waste that is disposed by landfilling or incineration. The EPA calls for source reduction as the primary tool in the waste management hierarchy, and it is integral to the Net Zero Waste strategy. Key components of source reduction include procurement of sustainable products and services, reuse of materials and waste exchanges, repurposing items into secondary uses, and management processes that create less waste.

5.1 Green Procurement.

GP (also known as sustainable procurement) is the purchase of environmentally beneficial products and services in accordance with one or more of the established Federal procurement preference programs. The benefits associated with GP practices include conserving resources, saving energy, saving landfill space, reducing pollution, and creating markets for recycled, biobased, and other environmentally beneficial materials. Federal Agencies are required to establish a GP Program to meet the requirements of the EPA “Buy Recycled” Program and the United States Department of Agriculture “BioPreferred” Program. DOD’s GP policy reaffirms a goal of 100 percent compliance with Federal laws and EOs requiring the procurement of green products and services (OUSDATL, 2008). The Federal GP Program includes the following categories of green products: recovered materials, biobased, environmental preferable, energy efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water efficient (WaterSense labeled), alternative fuels and fuel efficient vehicles, non-ozone depleting substances, electronic products registered with the Electronic Product Environmental Assessment Tool, and sustainable buildings.

5.2 Pollution Prevention.

The Pollution Prevention Act (PL 101-508, 1990) established P2 as a national objective in reducing waste at the source. This is to be achieved by lessening the toxicity and/or the quantity of waste generated through such tools as material substitution, use of raw materials, procurement policies, or process changes. The NSSC Environmental Office manages the NSSC P2 Program and strives to reduce or eliminate the impact that any NSSC operation may have on the environment through reduction or elimination of

wastes, more efficient use of raw materials and energy, and reduced emissions of toxic materials to the environment.

5.3 Reuse and Repurposing.

The practices of reuse and repurposing are being instituted or assessed on NSSC as potential diversion methods for waste streams. Reuse is using an item for its original intended purpose, such as collecting items for clothing drives, or collecting packing materials to be used in future shipments. Repurposing entails using a product in a different way or for a different application, while retaining its basic structure/appearance. Examples of repurposing are using industrial 55-gallon drums for the collection of waste.

5.4 Best Management Practices.

NSSC personnel will follow general office management practices that will minimize the generation of solid waste. Examples include practices that will save paper, such as setting the default on printers to print double-sided, using e-mail in place of written memos when possible, using electronic routing systems, providing electronic signature authority capabilities, and saving e-mail messages to files instead of printing them. Other procedures involve reuse and repurposing, such as sending internal mail in reusable envelopes, extending the life of file folders by using stick-on labels to cover old labels, and reusing plastic and paperboard binders.

6.0 INSTALLATION RECYCLING PROGRAMS

The NSSC operates a single stream collection executed through a solid waste services contract.

6.1 Single Stream Recycling Program.

The DPW Environmental Office has operated NSSC's single stream recycling program since 2011. The single stream program includes paper, cardboard, plastic bottles (plastic resin codes 1-7), glass bottles, and metal cans. The single stream recycling tonnage from FY11-22 is shown in Table 1.

Table 1. Scrap Metal and Single Stream Recycling Tonnage, FY11-21

Fiscal Year	Scrap Metal (tons)	Single Stream (tons)
2011	62	90
2012	55	108
2013	69	103
2014	69	91
2015	96	93
2016	136	90
2017	74	71

2018	64	57
2019	93	72
2020	62	46
2021	59	38
2022	60	12

The single stream program pays a solid waste services contractor to collect recyclables and transport to a Materials Recovery Facility (MRF) facility where they are separated and later sold. NSSC's contract allows the contractor to retain the sales proceeds in accordance with its agreement with the MRF. This arrangement is appropriate for a smaller installation that does not generate the quantities of recyclable materials to warrant a full-scale recycling program, and does not have the personnel to operate such a program.

6.2.1 Single Stream Segregation and Storage Procedures

The recyclable materials in the single stream program are generated by many employees in various NSSC activities, including office workers. Employees have desk-side containers for recyclables and are responsible for segregating wastes from recyclables and transporting the recyclables to containers at centralized collection points located within each building. The following items can be placed in the desk-side recycling containers:

- Plastics (with plastic resin codes 1-7)
- Glass (food and beverage containers only)
- Cans and other metal (aluminum, tin, steel, bi-metal, and jar lids)
- Paper (newspaper, magazines, cardboard, and paper products)
- Shredded paper (bagged)

The custodial contractor is responsible for collecting recyclables from centralized collection points in NSSC buildings and taking the material to the single stream compactor. The operation of the compactor and 30 yd^3 roll-offs at Bldg 20 are part of the solid waste services contract. The contractor picks up recyclables monthly or on an as-needed basis. The recyclables are transported to the Cassela Recycling of New England Zero-Sort Facility located in Charlestown, Massachusetts.

All activities and tenants at NSSC are required to participate in the installation recycling program, including the family housing communities. Family housing units are provided a collection bin for recyclables, and will be picked up curbside by the solid waste contractor on a bi-weekly basis.

6.2.2 Single Stream Collection and Reporting Procedures.

NSSC installed a certified truck scale in FY13 and began requiring contractors to obtain weights for all recyclable materials collected. Upon entering the installation, the vehicle operator is required to pull the truck up to the unattended remote scale terminal kiosk located on the scale on the west side of Bldg 20. The operator identifies the vehicle using a supplied radio frequency identification tag and obtains a vehicle tare weight. Prior to exiting the installation, vehicle operators repeat this process to obtain a vehicle weight ticket. A copy of the weight ticket receipt must be provided to the guard at the DeFranzo Service Gate upon exiting the facility. The weight tickets are retained by the Solid Waste Manager and provided to the solid waste contract COR. All weight data are included in the installation diversion rate calculations in SWARWeb.

6.2 Procedures for Specific Recycled Materials.

As stated in section 6.1, NSSC has a single stream recycling program that accepts paper products, aluminum and other metal containers, glass containers, and plastic containers. Other materials that are recycled at NSSC are lead-acid batteries, metals, green waste, textiles, fluorescent light fixtures, batteries, and C&D waste. Collection procedures for each recyclable material type are described below.

6.3.1 Aluminum, Glass, and Plastic.

Aluminum, glass, and plastic are all part of the single stream recycling program. NSSC personnel have a desk-side container for the collection of the materials and are responsible for transporting the materials to centralized recycling containers located in their building. Custodial contract personnel collect the commingled materials and bring them to the 40-yd^3 compactor located at Bldg 20. Some of these containers are subject to the Massachusetts Beverage Container Law ("Bottle Bill”), which places a 5- cent deposit on all carbonated soft drink, beer, malt beverage and sparkling water containers (including glass, plastic metal, aluminum, and bi-metal) sold in Massachusetts. Many employees take their used beverage containers to a redemption center, and therefore these items are not found in great abundance in the recycling or waste stream.

6.3.2 Cardboard and Paper Products.

Activities that generate cardboard are responsible for flattening cardboard and placing it in or adjacent to the centralized recycling containers located in each building. Other paper products (white paper, newspaper, magazines, and paperboard) should be placed in the employee’s desk-side recycling container and ultimately transported to the building’s centralized collection container. The custodial contract personnel collect the commingled materials and take them to the 40-yd^3 compactor located at Bldg 20. Shredded paper may be collected in the single stream recycling program. Activities that use onsite mobile shredding must be reported to the Solid Waste Manager so it may be counted towards the installation’s diversion rate.

6.3.3 Vehicular Products.

NSSC participates in a one-for-one exchange program for lead-acid batteries; the used batteries are collected and recycled when new ones are purchased. In the past, antifreeze and used oil were collected and recycled; however, most maintenance activities are presently conducted offsite and limited quantities of antifreeze and used oil are generated. Currently these small quantities of antifreeze and used oil are disposed along with other hazardous materials.

6.3.4 Green Waste.

The NSSC DPW Roads and Grounds personnel are responsible for grounds maintenance. Yard waste is centrally collected in a 30 yd3 roll-off behind Bldg 16 (Roads and Grounds). A contractor picks up the yard waste when requested and transports it to a composting facility. The quantity of green waste composted is captured in the SWARWeb data and counts toward NSSC's diversion rate.

6.3.5 Wood.

Wood is banned from landfill disposal in Massachusetts (see section 8.2.2 for information on banned wastes). Wood is generated primarily through small construction projects and repairs at NSSC. It is placed in the 30 yd^3 construction debris roll-off at Bldg. 111 and recycled or reused.

6.3.6 Fluorescent Lights.

Fluorescent light bulbs are managed as universal waste (a category of HW) and are turned in through the NSSC Hazardous Waste Program for recycling. Fluorescent light bulbs are crushed and recycled by a contractor.

6.3.7 Batteries.

Batteries are managed as universal waste, are collected in approved containers, and are turned in through the NSSC Hazardous Waste Program for recycling.

6.3.8 Toner Cartridges.

NSSC personnel are responsible for their own toner cartridge disposal. Individuals are encouraged to work with team leaders to coordinate and reduce time, travel, and confusion. Old / used cartridges are to be placed back into original packaging and recycled per manufacturer directions which may include dropping them off at the store or using the mail in return labels.
Historically, toner cartridges were picked up by a third party vendor for recycling. Unfortunately the previous vendor went out of business and another local vendor could not be found. No revenues are obtained from the recycling of the toner cartridges.

6.3.9 Textiles.

Per the Massachusetts Solid Waste Ban updated as of November 2022 100% of non contaminated textiles are to be recycled or re-used. In January of 2023 NSSC was

granted a one year waste ban waiver from the Massachusetts Department of Environmental Protection to allow for the disposal of fabric materials (textiles) through destruction via incineration with an approved contractor. Textiles included are those which are under development, being evaluated, or used for prototypes. The materials include proprietary and/or sensitive materials in-use or in-development by the government/private industry/academia for the protection against the elements, chemical/biological/nuclear threats, ballistic/blast exposures, and/or improved camouflage against current or emerging technologies. Propriety or sensitive materials relating to contracts, camouflage, and ballistics are used in designs and evaluated across the center on a continual basis.
All non proprietary / sensitive textile material including but not limited to clothing, bedding, fabric scrap, etc. must be recycled through the collection site managed by DPW Environmental.
The quantity of textiles recycled and destroyed via incineration is reported to the Solid Waste Manager and is captured in the installation's diversion rate.

6.3 Diversion Rate.

The diversion rate, expressed as a percentage, is the rate at which nonhazardous solid waste is diverted from entering a disposal facility. The diversion rate equals:

$$(R/(R+L))*100$$

Where:
R = amount (in tons) of nonhazardous waste diverted, and
L = amount (in tons) of solid waste disposed.

Recycling is the most prevalent form of diversion at NSSC. The diversion rates reported in Table 2 include the NSSC Recycling Program's total annual diversion rates since 2011, recorded in SWARWeb. In the past, the solid waste services contractor provided estimates on wastes generated, based on the container capacities and pickup frequency. NSSC installed a truck scale to enable exact weights of wastes and recyclables to be recorded. This enables much more accurate reporting of both wastes and recyclables generated at NSSC.

Table 2. Solid Waste Diversion Rates Reported for NSSC[1]

FY	Solid Waste Generated (tons)	Solid Waste Diverted (tons)	Solid Waste Disposed (tons)	Diversion Rate (% by wt)
2011	986	154	832	16%
2012	996	164	832	16%
2013[2]	350	175	175	50%
2014	352	176	175	50.1%
2015	425	246	179	57.9%

2016	421	253	168	60.13%
2017	309	165	143	53.5%
2018	400	248	152	61.9%
2019	446	268	178	60.1%
2020	297	151	146	50.8%
2021	258	139	120	53.9%
2022	234	135	99	55.31%

[1]Nonhazardous solid waste; does not include C&D waste
[2]Starting FY13, wastes and recyclables weighed on NSSC truck scale, increasing accuracy
Data Source: SWARWeb Comprehensive Reports

7.0 SOLID WASTE GENERATION AND COMPOSITION

7.1 Solid Waste Generation.

NSSC nonhazardous solid waste generation is similar to that of other light-industrial Army facilities, consisting mainly of administrative offices with some laboratory facilities and waste from family housing. Based on data collected since FY13 (when more accurate data were available using the certified truck scale), NSSC generates an average of 167 tons of *undiverted* solid waste (excluding C&D waste) on an annual basis (see Table 2). The total average annual tonnage of solid waste diverted is 219 tons, based on data since FY13. A 2015 solid waste characterization study conducted by the Army Public Health Center (APHC) provided useful data on the waste composition at NSSC (APHC, 2016). The results are discussed below.

7.2 Solid Waste Composition.

General nonhazardous waste at NSSC is generated from onsite operations, such as administrative offices, laboratories, test facilities, and cafeterias. A solid waste characterization study was conducted at NSSC in September 2015 by APHC (APHC, 2016). The study team collected 35 samples (over 2,000 pounds) from 18 dumpsters on the installation. Wastes in the samples were separated into 32 different categories. Figure 1 is a depiction of the overall composition of waste samples collected during the study. Note that samples were collected from waste containers only, and not from single stream collection points or other materials separated for recycling. The following are notable results for major waste categories in the characterization study.

7.2.1 Paper.

The high percentage of paper (34.2%) does not reflect recyclable paper in the waste stream; the majority of this paper was observed to be non-recyclable paper such as

used paper towels. The study data and onsite observations indicated that NSSC personnel are adequately segregating recyclables from the waste stream

7.2.2 Organics.

The second largest category identified was organics, including food waste (making up 26.7% of the waste stream). Most of the food waste was generated in the cafeteria in Bldg 1 and the Dining Facility (DFAC) in Bldg 14. (The study was conducted just before the initiation of a food waste diversion pilot study conducted in late 2015). The remaining food waste found in the dumpsters came from break rooms and offices, commingled with other trash. The Combat Feeding Directorate's Food Lab in Bldg 36 also generates food waste, consisting of Meals, Ready-to-Eat (MREs) that have been opened for testing. The study team found one dumpster completely full of boxed MREs (over 150 pounds).

7.2.3 Plastic.

Plastics identified (25.1%) consisted largely of plastic film, which includes trash bags, wrap, and packing material. Plastics in the solid waste stream for the most part did not include recyclable items that could be sent through the single stream recycling program. It is notable that some materials determined to be household waste were identified in the sampling study. NSSC should periodically remind personnel that household waste should not be brought in to the facility for disposal.

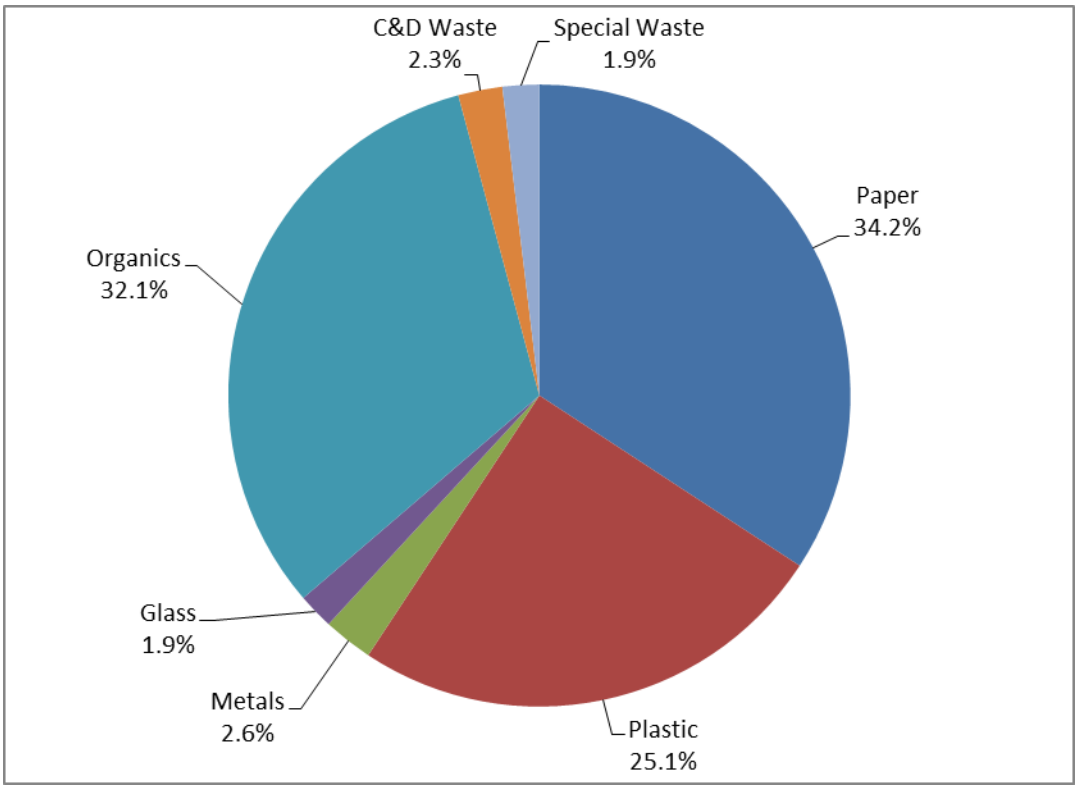

Figure 1. Waste Composition, NSSC Solid Waste Characterization Study (APHC, 2016)

8.0 SOLID WASTE MANAGEMENT PRACTICES

8.1 Solid Waste Collection and Disposal.

The custodial contractor is responsible for emptying individual waste containers at the point of generation, and transporting the waste to the waste dumpsters. The dumpster inventory is provided in Appendix E. The solid waste services contractor provides all labor, equipment (dumpsters, collection truck), and labor necessary to perform refuse and bulk recycling collection at the main NSSC campus and the family housing areas. Dumpsters are required to be designed to shed 100% of all precipitation and prevent vector attraction. The solid waste contractor (DBI Waste Systems, Inc.) collects the waste twice a week and transports it to the Wheelabrator 'energy-from-waste' facility located in Millbury, Massachusetts. The Wheelabrator Waste Combustor can process 1,500 tons of waste per day, producing 45 megawatts of renewable electricity to power its own operations and 47,000 homes in the local community. According to NSSC's solid waste services contract, the tipping fee charged to NSSC is approximately $130 per wet ton, resulting in NSSC annual expenditures approaching $20,400 for solid waste tipping fees.

To obtain more accurate waste generation data, NSSC installed a certified truck scale in FY13 and now requires the solid waste services contractor to measure and record the weight of all wastes picked up at the installation. Upon entering the installation, the vehicle operator pulls up to an unattended remote scale terminal kiosk located on the scale near Bldg 20. The operator identifies the vehicle using a radio frequency identification tag and obtains a vehicle tare weight. Prior to exiting the installation, vehicle operators repeat this process to obtain a vehicle weight ticket. A copy of the weight ticket receipt is then given to the guard at the DeFranzo Service Gate upon exiting the facility. The weight tickets are retained by the Solid Waste Manager and included in the installation diversion rate calculations in SWARWeb.

8.2 Management Practices for Specific Waste Types.

8.2.1 Residential Waste.

The solid waste services contractor is responsible for providing solid waste and recycling collection services for all family housing units located at Heritage Lane and General Greene Avenue.

8.2.2 Massachusetts Banned Wastes.

In 1990, the Massachusetts Department of Environmental Protection (MassDEP) first identified toxic and easy-to-recycle materials and banned them from landfill disposal or incineration. Since then, more materials have been added to the list, forcing businesses and communities to identify recycling or other diversion methods in lieu of disposal. The banned wastes are listed in Title 310 Code of Massachusetts Regulations (CMR) (CMR,

2014) and shown in Table 3. The NSSC's current management practices for these banned wastes are also included in the table.

8.2.3 Construction and Demolition Waste.

C&D waste consists of the debris generated during construction, renovation, and demolition projects and includes but is not limited to the following materials: lumber, reinforcing steel and other metals, piping and wiring, concrete, brick, plaster, wall board, roofing material, insulation, plumbing fixtures, doors, windows, and asphalt. Of these materials, asphalt pavement, brick, concrete, wood, metal, glass, and gypsum wallboard are subject to the Massachusetts waste ban. Contractors working at NSSC generating these materials are required to divert them from landfill disposal.

8.2.3.1 Diversion Goal.

Divert construction and demolition (C&D) waste to the maximum extent practicable towards the goal of 60% diversion [Department of Defense (DOD) Strategic Sustainability Performance Plan] (Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSDATL), 2016a).

Table 3. NSSC Management Practices for Massachusetts Banned Wastes

Waste Type	Storage	Collection/Disposal
Batteries	Batteries (nickel-cadmium, etc.) are managed as universal waste and are stored in approved containers at the point of generation. Alkaline are collected as non-haz waste	Batteries (alkaline, nickel-cadmium, etc.) are collected by the Hazardous Waste Program and are sent out to be recycled. Lead-acid batteries are exchanged on a one-for-one basis and are recycled.
Leaves and other yard waste	NSSC DPW Roads and Ground personnel store yard waste in a roll-off near Bldg 14.	Wellesley Trucking picks up the yard waste when requested and transports it to a composting facility.
Tires	NSSC does not generate tires.	NSSC does not generate tires.
White goods	Personnel submit a turn-in request to LRC and it is taken to the LRC warehouse.	Item is reused onsite if possible or is shipped to DLA Disposition Services.
Aluminum containers	Employees are instructed to place these wastes into recycling bins. Custodial staff collects the bins and transports the recyclables to the compactor located at Bldg. 20.	The solid waste contractor collects the recyclables and transports them to the recycling facility in Charlestown, Massachusetts.
Metal/glass containers	Employees are instructed to place these wastes into recycling bins. Custodial staff collects the bins and transports the recyclables to the compactor located at Bldg. 20.	The solid waste contractor collects the recyclables and transports them to the recycling facility in Charlestown, Massachusetts.
Single polymer plastics	Employees are instructed to place these wastes into recycling bins. Custodial staff collects the bins and transports the recyclables to the compactor located at Bldg. 20.	The solid waste contractor collects the recyclables and transports them to the recycling facility in Charlestown, Massachusetts.

Recyclable paper	Employees are instructed to place these wastes into recycling bins. Custodial staff collects the bins and transports the recyclables to the compactor located at Bldg. 20.	The solid waste contractor collects the recyclables and transports them to the recycling facility in Charlestown, Massachusetts.
Cathode ray tubes	Personnel submit a turn-in request to LRC and it is taken to the LRC warehouse.	If screen is intact, item is sent to the DLA Disposition Services; if screen is not intact, item is disposed of as hazardous waste.
Asphalt, brick, and concrete	See section 8.2.3.	See section 8.2.3.
Metal	Scrap metal are stored onsite in two 30 yd3 scrap metal roll-offs.	Scrap metal generators and LRC place all scrap metal in roll-off containers. Contractor removes metal for recycling when containers are full.
Wood	Wood is placed in the construction debris roll-off at Bldg. 111.	The wood is recycled or reused.
Clean gypsum wallboard	See section 8.2.3.	See section 8.2.3.
Textiles	Textiles are to be recycled unless covered by MassDEP waiver. Textiles are collected in the Garrison managed container	The solid waste contractor collects the recyclables and transports them to the recycling facility in Charlestown, Massachusetts. The solid waste incinerator collects the textiles for destruction and transports them to a facility in Westborough, MA

8.2.3.2 Construction and Demolition Activities at NSSC.

C&D waste is primarily generated by construction contractors working at NSSC. Contracts involving C&D require achievement of a 60% minimum diversion of C&D waste, by weight, from landfill disposal. It is the contractor's responsibility to report the quantity of C&D waste diverted and disposed. Applicable NSSC contracts require C&D contractors to submit a C&D Waste Management Plan and waste diversion data (referred to as LEED reports).

8.2.3.3 Contract Requirements for C&D Waste Management Plan.

AR 420-1 (DA, 2008) requires that all military construction, renovation, and demolition projects shall include performance requirements for a 50%[1] minimum diversion of C&D waste, by weight, from landfill disposal. This policy applies to all construction, renovation, and demolition projects. Specifications will include submission of a contractor's C&D Waste Management Plan at least 15 days prior to the start of site clearance activities. The purpose of the waste management plan is to minimize the generation of C&D waste and ensure the maximum quantity of potential C&D waste (including material generated during site clearing and existing structure demolition). The waste management plan should include the following elements:

- Responsible Persons. The plan shall designate personnel on the contractor's staff responsible for C&D waste prevention and management.

- Waste Characterization. The plan shall characterize the waste to be generated during the project including types and quantities. The characterization should address generation and disposition of all waste materials.

- Waste Disposal Location. The plan shall provide the name of the designated landfill and/or incinerator, tipping fee, and projected disposal costs for all waste to be disposed.

- Recycling Strategy. The plan shall provide a description of specific approaches to be used in recycling or reuse of various materials generated. For all disposed materials, including anticipated hazardous wastes, the plan must include names of haulers, disposal sites, and applicable permits and registrations.

NSSC has developed environmental contract language to be inserted in applicable contracts executed at the installation. The contract language includes the 60% diversion goal for C&D waste streams, the development of C&D waste management plans, use of installation dumpsters, and the collection and transport of ferrous and non-ferrous metals to the scrap metal containers at Bldg 20. The DPW staff responsible for solid waste management and recycling shall review the C&D waste management plans for installation-managed projects and participate in the review and approval of waste management plans for projects performed on the installation by others.

The requirements in this section are applicable to any construction, maintenance and repair, or demolition project large enough to warrant its own dumpster(s). Small maintenance and repair projects that generate minimal amounts of waste may not be subject to these requirements, at the discretion of the DPW - Environmental Office.

8.2.3.4 Documentation.

For each construction project requiring a C&D waste management plan, the COR shall document and monitor implementation of the approved plan. The DPW is responsible for reviewing the C&D waste management plan. In addition, the COR will ensure C&D activities and materials are monitored and quantified by the contractor for incorporation of the data into the installation's C&D diversion rate calculation within the SWARWeb database.

9.0 PROGRAM PROMOTION, OUTREACH, AND TRAINING

Public education is an integral part of a solid waste management program and particularly a recycling program. The recycling program requires aggressive promotion to ensure its continued success since it depends on the participation of every worker and visitor to the facility.

9.1 Program Promotion.

Command emphasis is vital to the sustained success of a recycling program and proper solid waste management, and can be in the form of an installation policy, celebration of America Recycles Day, or simply endorsement of the facility's recycling practices.

Recycling information will be made available to all installation personnel and provided in welcome packets to new family housing residents.

NSSC will install posters near all recycling stations, photocopiers, printers, and vending machines that communicate what recycling services are available and where recycling stations are located. NSSC will also ensure that signs are posted on all dumpsters that prohibit disposal of Massachusetts banned wastes (which includes many common recyclables) and C&D wastes.

9.2 Outreach.

NSSC will continue to support the Army's annual Earth Day event and emphasize waste segregation and recycling. To the extent feasible, NSSC will partner with local communities and schools to increase environmental awareness and will attend community-sponsored events such as neighborhood clean-ups.

9.3 Training.

Appropriate and relevant training is integral to the success and safety of solid waste management operations and recycling programs. Training programs may be in the form of formal training courses, on-line courses, hands-on applications, subscriptions to appropriate professional journals, or attendance at seminars and conferences. Relevant training opportunities that may be beneficial to NSSC personnel are presented in Appendix F. In addition, the NSSC Solid Waste Manager and Recycling Program Manager will participate in information sharing events hosted by the HQ Army Installation Management Command (IMCOM). These include quarterly Net Zero waste collaboration calls that allow installations within an IMCOM region to share success stories, challenges, and diversion data.

10.0 RECORDKEEPING, TRACKING, AND REPORTING

10.1 Solid Waste Management Records.

The Solid Waste Manager will ensure that the recordkeeping and reporting system captures all recycling activities that occur at NSSC. This will enable the Solid Waste Manager to accurately provide required annual reports to the Army via SWARWeb. Solid waste records include:

- Weight tickets from collection of solid waste
- Weight tickets from collection of recyclables (single stream)

- Wide Area Work Flow invoice payments
- DD Form 1348-1A for the turn-in of scrap metal to DLA (if under DLA Contract)
- Weight tickets from scrap metal collection
- Copies of receipts or bills of lading
- Invoices from solid waste services contractor
- Landfill tipping fee receipts
- Contract deliverables for solid waste generation and diversion (LEED reports)

10.2 Tracking and Reporting.

10.2.1 SWARWeb.

The NSSC will track the nonhazardous solid waste diversion rate and cost avoidance and report solid waste generation, disposal, and diversion data annually in SWARWeb, which is an Army system to track and report installation solid waste and recycling data. The NSSC Solid Waste Manager will ensure the quantities of solid waste disposed and diverted from the waste stream are reported to the NSSC Environmental Office for inclusion in SWARWeb. NSSC will use actual weight data obtained from the certified truck scale to measure wastes and recyclables hauled off the installation.

10.2.2 Construction and Demolition Waste Disposal and Diversion.

Contractors shall provide C&D waste disposal and diversion rates, or other approved quantifiable data, to the COR as required by contract, and the COR will provide this data to the Solid Waste Manager. The C&D diversion report form (Appendix C) may be used to record C&D waste generation and diversion data. The Solid Waste Manager will ensure that C&D activities and quantities are captured and reported annually in the SWARWeb.

10.2.3 Future Reporting

DODI 4715.23 requires installations to report four Measure of Merits (MoMs) and requires the DOD components to track and report certain data elements, all of which are currently captured in the SWARWeb.

10.2.3.1 Solid Waste MoMs. DODI 4715.23 lists the following four MoMs:

- Per capita generation of solid waste (without C&D debris). Population is based on permanent installation personnel unless the installation can provide a more accurate

number of personnel during the year

- Diversion rate of solid waste (without C&D debris)
- Diversion rate of C&D debris
- Economic benefit of solid waste diversion

10.2.3.2 Additional Data Elements. DODI 4715.23 requires the DOD components to report and track progress regarding the following data elements:

- Quantity of nonhazardous solid waste generated (excluding C&D debris)
- Quantity of nonhazardous solid waste diverted (excluding C&D debris)
- Diversion rate of nonhazardous solid waste (excluding C&D debris)
- Quantity of C&D debris generated
- Quantity of C&D debris diverted
- Diversion rate of C&D debris.
- Installation population.
- Per capita generation of nonhazardous solid waste (excluding C&D debris).
- Quantity of composted material
- Quantity of nonhazardous solid waste (excluding C&D debris) sent to waste-to-energy facilities.
- Quantity of nonhazardous solid waste incinerated (excluding C&D debris and waste-to-energy facilities).
- Quantity of nonhazardous solid waste landfilled (including C&D debris).

11.0 SOLID WASTE MANAGEMENT ACTION ITEMS

The following action items will help ensure that NSSC continues to operate its solid waste disposal and recycling activities in a manner protective of human health and the environment and maintains compliance with applicable regulations. These action items have been placed in one of two categories: process implementation or improvement, and new areas of waste diversion. Provided with each action items is a reference to a section of this plan for more information.

11.1 Process Implementation or Improvement.

- Request organizations using onsite paper shredding services to confirm that shredded paper is recycled, and report the amount (in pounds) to the Solid Waste Manager, so it may be counted towards the installation's diversion rate.

- As part of promotion and outreach campaigns, periodically remind personnel that household waste should not be brought in to the facility for disposal, and emphasize the segregation of cardboard from the waste stream.

- Review and update the ISWMP every 5 years or as needed in response to mission, solid waste program, or regulatory changes. This review will include an evaluation of the overall effectiveness of the solid waste management program.

12.0 TECHNICAL POINT OF CONTACT

The NSSC Solid Waste Manager and Recycling Program Manager, Melissa Iozzo, may be reached at (508) 206-4129 or via email at Melissa.J.Iozzo.civ@Army.mil.

APPENDIX A

REFERENCES

APHC, 2016. Memorandum, APHC, MCHB-IP-EHM, subject: Solid Waste Characterization Study NO. S.0033960.2, U.S. Army Natick Soldier Systems Center, July 2016.

CMR, 2014. Title 310, Code of Massachusetts Regulations (CMR) 19.017, Waste Disposal Ban Regulations, amended February 2014.

DA, 2014. Memorandum, Department of the Army, Office of the Deputy Chief of Staff, G-4, DALO-SUF, subject: Army Food Donation Procedures, 31 July 2014.

DA, 2008. Army Regulation (AR) 420-1, *Army Facilities Management*, 12 February 2008.

DA, 2007. AR 200-1, *Environmental Protection and Enhancement*, Department of the Army, 13 December 2007.

EO 13834, 2018. Executive Order (EO) 13834, Efficient Federal Operations, 18 May 2018.

OUSD, 2015. Department of Defense Strategic Sustainability Performance Plan, Office of the Under Secretary of Defense, 2015.

OUSD, 2008. Memorandum, Under Secretary of Defense for Acquisition, Technology and Logistics, 2 December 2008, subject: Updated Green Procurement Program (GPP) Strategy.

OUSDATL, 1998. Department of Defense Instruction 4715.4, Pollution Prevention. Under Secretary of Defense for Acquisition and Technology, 18 June 1996, Revised 6 July 1998.

PL 101-508, 1990. Public Law 101-508, Pollution Prevention Act of 1990, Washington DC.

PL 97-214, 1982. Public Law 97-214, Military Construction Codification Act, 10 U.S.C. 2577, Disposal of Recyclable Materials, Washington, DC, 12 July 1982.

SECARMY, 2014. Memorandum, Secretary of the Army, subject: Army Directive 2014-02 (Net Zero Installations Policy), 28 January 2014.

APPENDIX B

RELEVANT SOLID WASTE REGULATIONS AND POLICIES

Document Citation and Location	Content
Federal Laws and Regulations	
Public Law 94-580, Resource Conservation and Recovery Act (RCRA), 21 October 1976 To Access RCRA online, a search database, go to: https://yosemite.epa.gov/osw/rcra.nsf/how+to+use?OpenForm	RCRA established standards and guidelines for the management of hazardous and nonhazardous solid wastes. RCRA was promulgated to encourage waste minimization through source reduction and use of nonhazardous substances, recycling, affirmative procurement, and conversion of waste-to-energy. RCRA also established the legislative language governing solid and hazardous waste storage, transportation, and disposal. RCRA Section 6002 requires the Federal Government to promote standards and practices for the procurement of products made from recycled materials. RCRA regulations are contained in Title 40, Code of Federal Regulations (CFR), Parts 239 to 282. RCRA Subtitle C (40 CFR 260-279) contains the hazardous waste regulations, and RCRA Subtitle D (40 CFR 239-259) contains the regulations for solid waste. Some significant sections of Subtitle D are summarized below. Part 243 (Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste). Part 243 establishes requirements and recommended practices for the storage, collection, and management of solid waste and for the operation of vehicles used in collection, transport, and handling of waste. Part 246 (Source Separation for Materials Recovery Guidance). Part 246 contains recycling requirements for the recovery of paper, corrugated containers, and other consumer goods. Part 247 (Guidelines for the Procurement of Products that Contain Recycled Material). Part 247 contains requirements regarding “buy recycled” practices that will stimulate the recovered materials market.
Public Law 101-508, Pollution Prevention Act of 1990, 5 November 1990. https://www.epa.gov/laws-regulations/summary-pollution-prevention-act	The Pollution Prevention Act established a national policy to prevent or reduce waste generation through reduction, reuse, recycling, and treatment. The act established the P2 hierarchy which is the cornerstone of integrated solid waste management.
Public Law 97-214, *Military Construction Codification Act*, 1982, codified in Title 10, United States Code 2577. https://www.govtrack.us/congress/bills/97/hr6451	This law established the framework for military installations to sell recyclable materials and operate recycling programs. It requires that proceeds from the sale of recyclable materials at an installation be used to cover the costs of operations, maintenance, and overhead for processing recyclable materials at the installation.

Executive Order	
EO 13834, Efficient Federal Operations https://www.federalregister.gov/documents/2018/05/22/2018-11101/efficient-federal-operations	• Implement waste prevention and recycling measures and comply with all Federal requirements with regard to waste management and disposal. • Acquire, use, and dispose of products and services in accordance with Federal Acquisition Regulation (FAR) requirements for recycled content, biobased, water-efficient, and energy-efficient products as well as other sustainable products identified by the EPA.
Commonwealth of Massachusetts Regulations	
310 Code of Massachusetts Regulations (CMR) 19.017, Waste Disposal Ban Regulations http://www.mass.gov/eea/agencies/massdep/recycle/regulations/310-cmr-19-00.html	Most of the regulations in 310 CMR 19 (Solid Waste Management) pertain to solid waste management facilities and do not pertain to Natick operations. Relevant to NSSC is 310 CMR 19.017, which prohibits the disposal of the following waste types: Leaves and other yard waste Whole tires White goods (large appliances) Aluminum containers Metal and glass containers Ferrous and non-ferrous metals Single polymer plastics Recyclable paper, cardboard and paperboard Cathode ray tubes Asphalt pavement, brick, and concrete Metal Wood and wood waste Clean gypsum wallboard Commercial food waste Lead-acid batteries Mattresses Textiles The waste types listed above cannot be transferred for disposal or disposed as waste, but may be transferred for further processing, reuse, or recycling.
Department of Defense Policies	
Department of Defense Instruction 4715.4, Pollution Prevention, 18 June 1996. http://www.dtic.mil/whs/directives/corres/pdf/471504p.pdf	DOD Instruction 4715.4 establishes the DOD requirement for installation QRPs, develops an accounting and control system for recycling programs, obligates contractors to participate in installation recycling programs, authorizes direct sales of recyclables, and calls for GP.

Memorandum, Assistant Deputy Under Secretary of Defense (Environment), 22 April 2003, subject: Qualified Recycling Program Guidance.	This memorandum gives direction on conducting and reconciling sales and financial records, using net proceeds from the sale of recyclables, handling costs associated with recycling programs, and considering outsourcing opportunities.
Memorandum, Assistant Deputy Under Secretary of Defense (Environment, Safety, and Environmental Health), 12 October 2004, subject: Revised Pollution Prevention and Compliance Metrics.	This memorandum supersedes the 1998 DOD Measure of Merit and it requires DOD facilities to establish a cost-effective solid waste management program that reduces solid waste generation, increases diversion rates, and optimizes cost avoidance.
Memorandum, Acting Deputy Under Secretary of Defense (Installations and Environment), 1 February 2008, subject: DOD Integrated (Non-Hazardous) Solid Waste Management Policy	This memorandum requires all facilities to maintain waste prevention and recycling programs in the most cost-effective manner possible and set solid waste diversion goals. The memorandum provides guidelines for implementing integrated solid waste management, including recommending an initial solid waste characterization study to define the basis for diversion goals. The guidelines also state that complying with GP practices will have a positive effect on source reduction.
Army Requirements and Policies	
Memorandum, Assistant Chief of Staff for Installation Management, 31 August 2001, subject: Management of Construction and Demolition (C&D) Waste.	The memorandum establishes guidelines for the development and implementation of programs to effectively manage wastes generated during C&D activities and requires the development of C&D waste management plans for all military C&D projects.
Memorandum, Assistant Chief of Staff for Installation Management, 6 February 2006, subject: Sustainable Management of Waste in Military Construction, Renovation, and Demolition Activities.	The memorandum requires all military construction, renovation, and demolition projects to divert a minimum of 50% of C&D waste by weight from landfill disposal and requires contract specifications to include submission of a contractor's C&D Waste Management Plan.
Army Regulation 200-1, Environmental Protection and Enhancement, Chapter 10-2, Solid Waste, 13 December 2007. http://armypubs.army.mil/epubs/pdf/R200_1.pdf	AR 200-1 establishes Army policies, procedures, and responsibility for environmental program areas; requires installations to develop an ISWMP; establishes a solid waste Measure of Merit (since superseded); and authorizes direct sale of recyclables.
Army Regulation 420-1, Army Facilities Management, Chapter 23, Utility Services, Section III, 12 February 2008. http://armypubs.army.mil/epubs/pdf/r420_1.pdf	AR 420-1 requires implementation of integrated solid waste management, development of the ISWMP, implementation of source reduction programs for the solid waste stream, implementation of a QRP when cost effective, a 50% diversion of C&D waste from disposal, and a green waste management program.

APPENDIX C

NSSC POLICY STATEMENT NO. 25-2019
SOLID WASTE REDUCTION

DEPARTMENT OF THE ARMY
US ARMY NATIC!(SOLDIER SYSTEMS CENTER
10 GENERAL GREENE AVENUE
NATICK, MA 01760-5000

FCDD-NSS-C

JUN 1 4 2022

MEMORANDUM FOR All Natick Soldier Systems Center (NSSC) Elements

SUBJECT: NSSC Policy Statement No. 07-2022, Solid Recycling and Waste Reduction

1. REFERENCES:

a. Executive Order (EO) 14057, (Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability) 08 December 2021. (This EO revokes 13834 Efficient Federal Operations), 17 May 2018.

b. Title 310, Code of Massachusetts Regulations (CMR) 19.017, (Waste Disposal Ban Regulations), 29 October 2021.

c. Memorandum, Secretary of the Army, Army Directive 2014-02 (Net Zero Installations Policy), 28 January 2014.

d. Department of Defense Instruction 4715.23, (Integrated Recycling and Solid Waste Management), 24 October 2016.

e. Federal Acquisition Regulations, Part 23, (Environment, Energy, and Water Efficiency, Renewable Energy Technologies, Occupational Safety, Drug-Free Workplace), 01 May 2022.

2. APPLICABILITY: This policy is applicable to all Military and Civilian personnel working at NSSC, including all mission, Garrison and tenant organizations, vendors, suppliers, and contract support personnel.

3. PURPOSE: To establish command policy for solid waste reduction at NSSC.

4. POLICY: NSSC is committed to reducing natural resource consumption and solid waste generation through resource recovery, re-use, and recycling. Full conformance with this policy will maintain compliance with Commonwealth of Massachusetts waste ban restrictions, minimize waste generation, and strive to achieve the goal of Net Zero Waste in accordance with Secretary of the Army Directive 2014-02.

5. PROCEDURES:

a. All personnel at NSSC shall participate in and support the recycling program by identifying, collecting, separating, and placing recyclables into the proper bins, breaking

down cardboard boxes, and removing contaminants from all potentially recyclable materials.

b. All personnel at NSSC shall participate in and support the solid waste reduction and recycling program by ensuring all construction and demolition (C&D) related waste and wood waste are appropriately placed in the C&D roll off located next *to* Building 111, as well as making sure all metal waste items are placed in the scrap metal dumpster located behind Building 20.

c. Reduce the amounts of solid waste generated through procurement of products with recycled materials content or reusable packaging, buying only the amounts needed, seeking and implementing new recycling and reuse procedures, and altering operations to reduce waste streams.

d. All contracting and purchasing requests will take into consideration source reduction through the procurement of sustainable products and services in accordance with Federal Acquisition Regulations and DoP policies regarding sustainable procurement, reuse or repurposing of materials, management processes that create less waste, and initiatives to enhance the diversion and recovery of recyclable materials.

e. Ensure that all performance work statements contain source reduction requirements that minimize packing and packaging materials for items being shipped to the installation.

6. The proponent for this policy Is the Environmental Office, Directorate of Public Works, (508) 206-4134.

7. This policy supersedes NSSC Policy Letter No. 25-2020, Solid Waste Reduction, 8 May 2020.

Wc SJA

Brigadier General, USA
Commanding

DISTRIBUTION:
All NSSC Elements

APPENDIX D

SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION

Project Name:_____Project Number: _____

Contractor Name:_____License Number: _____

Contractor Address: _____

Solid Waste Material	**Date Material Disposed/ Diverted**	**Amount Disposed/ Diverted** (tons/cubic yards)	**Municipal Solid Waste Facility**	**Recycling/ Reuse Facility**	**Comments** (if disposed, state why not diverted)
Appliances					
Asphalt					
Cardboard					
Carpet					
Concrete					
Gypsum Drywall					
Land Clearing/Soil					
Masonry					
Metals: Ferrous					
Metals: Non-ferrous					
Mixed/Co-mingled Waste					
Plastic					
Roofing: Asphalt-based					
Roofing: EPDM*					
Wood: Landclearing Debris					
Wood: Scrap Lumber					
Ceiling Tiles					
Vinyl Composition Tile					
Salvaged/Surplus Materials for Reuse					
Other:					

Signature:_____Date: _____

Adapted from Whole Building Design Guide, Federal Green Construction Guide for Specifiers, http://www.wbdg.org/ccb/
*Ethylene propylene diene terpolymer

APPENDIX E

SOLID WASTE DUMPSTER INVENTORY

Location	Number of Containers	Size (cubic yards)
Bldg – 01 Headquarters	2	10, 10
Bldg – 05 Fabrication Shop	2	10, 10
Bldg – 14 Roads & Grounds	1	4
Bldg – 15 Barracks	1	6
Bldg – 19 Boiler Plant	1	10
Bldg – 20 Logistics	1	10
Bldg – 32 FMWR	1	4
Bldg – 38 Dining Hall	1	10
Bldg – 45 DPW	2	10, 6
Bldg – 86 Navy HQ	2	10, 6
Bldg – 92 Training Ctr	1	4
Bldg – 110 Thermal Test Facility	1	4
Picnic Area	1	6

APPENDIX F

SOLID WASTE AND RECYCLING TRAINING OPPORTUNITIES

1. Solid Waste and Recycling Training.

Focused training can help keep the Solid Waste and Recycling Manager informed of new technologies and opportunities to recycle or otherwise reduce wastes. Recommended sources include the Air Force Institute of Technology course, WENV 160 Qualified Recycling Program Management, which is a training course approved by the Interservice Environmental Education Review Board for all DOD components. This course emphasizes principles and techniques used to implement a sound Qualified Recycling Program. The course focuses on eligible and ineligible items for recycling, QRP regulations, recycling processing equipment, collection and sorting methods to maximize returns, working with DLA Disposition Services, establishing contracts, recording transactions, DOD recordkeeping, and estimating budgets.

Solid waste management alternatives, new technologies, and P2 initiatives are constantly evolving. Recommended conferences for current information are the National Recycling Coalition (NRC) annual Resource Recycling conference; and the Solid Waste Association of North America (SWANA) annual conference (WasteCon). The SWANA Training Center offers a variety of courses on solid waste management and recycling at https://swana.org/Education.aspx. The NRC also offers courses and webinars on waste reduction and recycling at http://nrcrecycles.org/get-involved#webinars.

2. General Environmental Training.

Sources of training on general environmental considerations, principles, and laws include the U.S. Army Corps of Engineers (USACE) Learning Center in Huntsville, Alabama. Courses include Environmental Considerations in Planning (course no. 408), Environmental Laws and Regulations (course no. 170), and Environmental Regulations Practical Application (course no. 398). More information is available at http://ulc.usace.army.mil/.

3. Construction and Demolition Waste Management Training.

The USACE Learning Center also provides classes on master planning and sustainable building design and construction, including course no. 244, Sustainable Military Building Design and Construct. A listing of courses is available at http://ulc.usace.army.mil/.

Attachment 3 – NSSC Contractor Site Access Request Form

FOUO

NSSC Contractor Access Request Form

Company Name:_____ **Bldg/Area working:_____**
NSSC POC: _____ **POC Phone #:_____**

Last Name	First Name	DOB	DL#	DL State	Current Address	States Resided In During Past 5 Years

CONTRACTORS ONLY

- Per U.S. Army Directive-Type Memorandum (DTM) 09-012, all of the above information is required for unescorted access. If the POC or visitor elects not to provide all the information requested, then the visitor must be signed in at the gate by the POC and escorted the entire time they are on the installation. The POC will only be notified if the visitor is not authorized entry onto the installation.

- All U.S. visitors 18 years of age and older must be vetted prior to entry to NSSC. Foreign visitors (both official and unofficial) must be vetted through the appropriate Foreign Disclosure Officer based on the organization he/she is coming to see. Please contact the appropriate office for instructions. For NSRDEC/TACOM contact 508-233-5497 and for all others contact DPTMS at 508-233-6972.

FOUO

In compliance with the Privacy Act of 1974, this information is Personal Data and must be protected from disclosure.

- To protect PII, there are two methods of submitting this form. This form can be emailed encrypted to "USARMY Natick SSC IMCOM Atlantic List NATI-PoliceVisitorAccess" at email address usarmy.natick.imcom-atlantic.list.nati-policevisitoraccess@mail.mil. Alternatively, this form can be faxed to (508) 233-6293.

- Requests must be received by USAG Natick Police at least 24 hours prior to the visitor's arrival. Upon successful vetting, the visitor will be added to the Daily Access Roster for the date of the visit. The Daily Access Roster is maintained at the Main Gate.

- If a visitor has already been vetted within the last 90 days, then send an email request to the above address at least 24 hours prior to the visitor's arrival. Include the visitor's full name, date of visit, time of visit and POC. If the visitor was vetted within the last 90 days, they will be added to the Daily Access Roster. Visitors not vetted within the last 90 days will have to resubmit this form to the USAG Natick Police.

- Contact the USAG Natick Police Desk at 508-233-4201, to verify whether or not a visitor has been vetted within the last 90 days.

- Please direct any questions regarding this process to the USAG Natick Police Desk at 508-233-4201 or Rick Dutkiewicz at 508-233-4099.

CONTRACTORS ONLY

In compliance with the Privacy Act of 1974, this information is Personal Data and must be protected from disclosure.

Attachment 4 – Accident Prevention and Safety

Plan Table of Contents

ACCIDENT PREVENTION PLAN
HEALTH AND SAFETY PLAN
TABLE OF CONTENTS

A. Signature Sheet
1. Plan Preparer
2. Plan Approver
3. Plan Concurrence

B. Background Information
1. Contractor Name
2. Contract Number
3. Project Name
4. Brief Project Description
5. Location of the Project (Map)
6. Contractor Accident Experience
7. Phases of Work and Hazardous Activities Requiring an Activity Hazard Analyses (AHA).

C. Statement of Health and Safety Policy
1. Corporate Safety and Health Policy Statement
2. Contractor's Written Safety Program Goals
3. Contractor's Written Safety Program Objectives
4. Contractor Accident Experience

D. Responsibilities and Lines of Authority
1. Statement of Ultimate Responsibility
2. Identification and accountability of personnel responsible for safety and health at both the corporate and project level
3. Equivalent Training to the OSHA 30-Hour Classes is Being Presented as Qualification
4. Site Specific Competent Person(s)
5. Requirements and Details of the Employer's Risk Management Process.
6. Requirements for Initial Activity-Specific AHAs to be Submitted and Accepted at Preparatory Meetings, Prior to Work Being Performed
7. No Work Requirement
8. Policies and Procedures Regarding Non-Compliance with Safety Requirements
9. Lines of authority
10. Written company procedures for holding managers and supervisors accountable for safety

E. Subcontractors and Suppliers
1. Identification of Subcontractors and Suppliers
2. Safety Responsibilities of Subcontractors and Suppliers

F. Training

1. New Comer Safety Orientation Training
2. Requirements for Mandatory Training and Certifications that are Applicable to this Project
3. Procedures for Periodic Safety and Health Training for Supervisors and Employees

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4. Emergency Response Training

G. Safety and Health Inspections

1. Specific Assignment of Responsibilities
   - 1.a Name(s) of Individual(S) Responsible for Conducting Safety Inspections
   - 1.b Documented Proof of Inspector's Training / Qualifications
   - 1.c Frequency that Inspections Shall be Conducted
   - 1.d Procedures for Documentation
   - 1.e Deficiency Tracking System and Follow-Up Procedures
2. External Inspections/Certifications

H. Incident Reporting and Investigation

1. Exposure Data
   - 1.a Mishap Investigations, Reports and Logs
   - 2.b Immediate Notification of Major Accidents
   - 2.c KO/COR Notification

I. Plans, Programs and Procedures

1. Fatigue Management Plan
2. Emergency Response Plans
   - 2.a Procedures & Test
   - 2.b Spill Plans
   - 2.c Fire Fighting Plan
   - 2.d Posting of Emergency Telephone Numbers
   - 2.e Man Overboard/Abandon Ship
   - 2.f Plan for Prevention of Alcohol and Drug Abuse
3. Site Sanitation/Housekeeping Plan
4. Medical Support Agreement
5. Blood-Borne Pathogen Program
6. Exposure Control Plan
7. Automatic External Defibrillator (AED) Program
8. Site Layout Plan
9. Access and Haul Road Plan
10. Hearing Conservation Program
11. Respiratory Protection Plan
12. Health Hazard Control Program
13. Hazard Communication Program
14. Process Safety Management Plan
15. Lead Compliance Plan
16. Asbestos Abatement Plan (If Applicable)
17. Abrasive Blasting
18. Heat Stress Monitoring Plan (HSMP)
19. Cold Stress Monitoring Plan (CSMP)

20. Indoor Air Quality Management Plan
21. Mold Remediation Plan
22. Lighting Plan for Night Operations
22. Traffic Control Plan
23. Fire Prevention Plan
24. Arc Flash Hazard Analysis
25. Assured Equipment Grounding Control Program (AEGCP)
26. Hazardous Energy Control Program and Procedures

Critical Lift Plan – LHE

29. Fall Protection and Prevention Plan
30. Demolition/Renovation Plan
31. Site Safety and Health Plan (HTRW)
32. Confined Space Entry Procedures
33. Confined Space Program

J. Risk Management Processes

Appendixes

Appendix A – Key Personnel Resumes
Appendix B – Health and Safety Inspection Forms
Appendix C - Emergency Action Plan
Appendix D - Accident Prevention Plan Sign off Sheet
Appendix E - OSHA Whistleblower Fact Sheet and OSHA Lightning Safety Fact Sheet

Attachment 5 – Construction Submittal Register

Division 01 — General Requirements

- Two-Week Schedule of work activities
- Submittal Register
- Accident Prevention Plan (APP)
- Daily Reports
- Qualification Records
- Closeout Submittals
    - Indoor Air Quality
    - Commissioning: Electrical, plumbing, Data
        - Commissioning Plan
        - Commissioning Reports
- Waste Management Plan
- Operation and Maintenance (O&M)
    - O&M Manuals
    - O&M Training

Division 10 — Specialties

Plumbing

Division 26 — Electrical

- Electrical systems
    - Product information

Division 27 — Communications

- Data systems
    - Product information

*This checklist is provided for the Contractor's convenience. Contractor shall provide submittals as required by the documents and to execute the design intent of the drawings.

Attachment 6:Outdoor Shaded Work Are Locations and Concept Sketches

ID	Dimensions (approx.)	Location	Notes
1	40’ x 65’	Bldg. 1 Entrance	Shaded Ceremony or Food Truck Seating
2	50’ x 50’	Corner of Bldg. 65	Shaded Area to get outside
3	30’ x 45’	Back of Bldg. 5	G6/IT Waiting Area
4	40’ x 60’	Between Bldg. 3 & 4	Central to most employees

1

2

3

4

Notional Concept Sketches

Building 1 Entrance

Approximate Dimensions: 40 ft x 65 ft

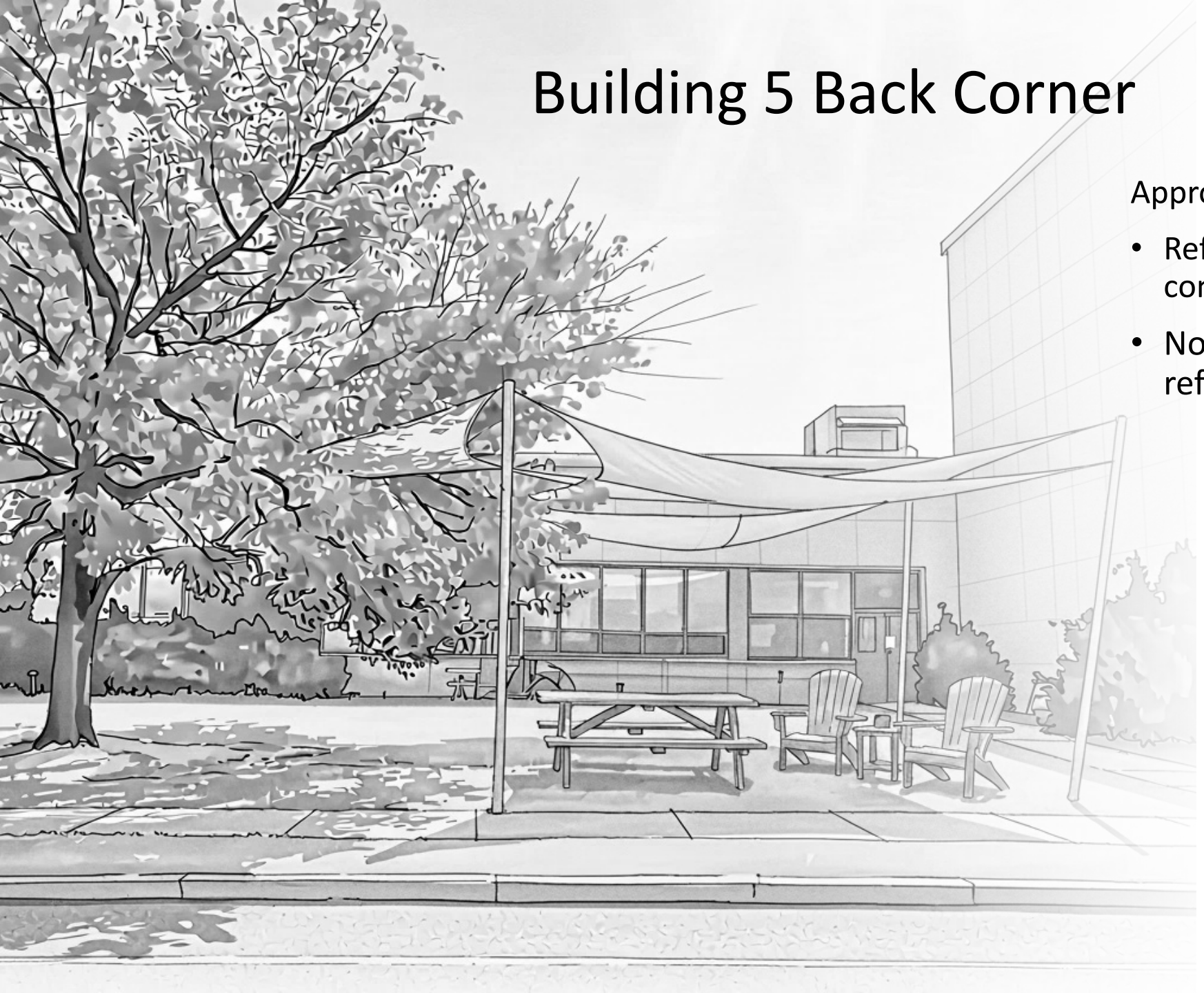
- Refer to scope of work for construction details.
- Notional Concept Sketch is for reference only

Building 65 Corner

Approx. Dimensions: 50 ft x 50 ft

- Refer to scope of work for construction details.
- Notional Concept Sketch is for reference only

Building 5 Back Corner



Approx. Dimensions: 30 ft x 45 ft

- Refer to scope of work for construction details.
- Notional Concept Sketch is for reference only

Buildings 3 & 4 Grassy Quad

Approx. Dimensions: 40 ft x 60 ft

- Refer to scope of work for construction details.
- Notional Concept Sketch is for reference only