

## **VI. CONSTRUCT ARMY PHYSICAL TRAINING FIELD**

### TABLE OF CONTENTS

#### Statement of Work (SOW)

Part 1 – Scope of Work SOW - 04

Part 2 – Products SOW - 12

Part 3 – Execution SOW - 17

Part 4 – Utility Outages and Special Conditions SOW - 18

Part 5 – Environmental Requirements SOW - 18

Part 6 – Site Maintenance and Cleanup SOW - 22

Part 7 – Energy Conservation SOW - 23

Part 8 – Responsibility SOW - 23

Part 9 – Storage and Parking SOW - 23

Part 10 – Completion of Work SOW – 23

Part 11 – Technical Exhibits:

11A. Geotechnical Report – Proposed Shade Structure Beaver Fit Locker

#### REFER TO ATTACHMENT A FOR REPORT

11B. Drawings:

- 2 CS-1 Cover Sheet
- 3 CS-2 Index of Drawings, Notes, Abbreviations
- 4 CS-3 Project Notes
- 5 SP-1 Site Plan
- 6 SP-2 Miscellaneous Details
- 7 PE-1 Utility Plan
- 8 PE-2 Electrical Plan

11C. AF Form 66

## **CONSTRUCT ARMY PHYSICAL TRAINING FIELD**

### **STATEMENT OF WORK**

#### **PART 1.0 – SCOPE OF WORK:**

1.1 **GENERAL:** The work to be performed under this contract and in accordance with this Statement of Work shall consist of furnishing all necessary parts, labor, tools, transportation, supplies, supervision, equipment, materials, and incidentals necessary for providing all work shown on the drawings (Technical Exhibits), statement of work, and all applicable codes, regulations, standards and criteria in effect at the date of solicitation. The work outlined below shall consist of, but not be limited to the constructing of a new physical training field at Goodfellow Air Force Base.

1.2 **AGENCY RELATIONSHIP:** Tom Green County (TGC) has sole contract authority. 17th Civil Engineer Squadron (17 CES) Goodfellow AFB shall serve in the role of providing contract coordination/monitoring but shall not have any direct contract authority to approve or disapprove construction work. All contract correspondence shall be directly submitted to TGC contract representative.

1.4 **LOCATION:** Goodfellow Air Force Base is located in Tom Green County, on the southeast side of San Angelo, TX. and is bounded to the north by Highway #388 (Paint Rock Rd.), to the west by Fort McKavitt Rd and Bell Street/Christoval Road, to the south by Highway #1223 (San Antonio Hwy.) and to the east by the eastern city limits. Work location is by the tennis courts near Building #140 as described on the plans and haul routes.

#### **1.3 PROJECT DESCRIPTION:**

The Contractor shall construct an Army Physical Training Field as described in this Statement Of Work and Drawings. The Army Physical Training Field shall have artificial turf surfacing, area lighting/electricity and site work to include construction of connecting sidewalk and a concrete slab for bleachers. If any departure from the SOW are deemed necessary by the Contractor, details of such departures and the reasons therefore shall be submitted as soon as possible to the Contracting Officer, or designated representative for action. No such departures shall be made without prior approval of the Contracting Officer, or designated representative.

2.2 **SITE VISITS:** The Contractor shall visit the site to become thoroughly familiar with details of the work and working conditions, verify dimensions in the field, and shall advise the Contracting Officer of any discrepancies before starting the work

1.5 **WORK AND MECHANICS:** The work for this project shall be executed in the best and most workmanlike manner, by qualified and efficient mechanics/tradesmen, skilled in their respective trades. Only certified journeymen in each respective trade, or apprentices under the direct supervision of certified journeymen, shall be permitted to install and/or

## ARMY TRAINING FIELD

supervise installation for this project. Individual trade work for this project shall be performed and quality maintained by the applicable trade, only. All trades shall coordinate their work with that of other trades. The Contractor shall coordinate and perform all operations in a manner that shall result in a professional and expeditiously completed project. The Contractor shall provide items of work not specifically indicated, but obviously and/or normally required to complete and properly execute the work. The work shall be in strict accordance with prevailing industry standards and manufacturer's instructions. Work and materials shall comply with this Statement of Work, the Drawings and the editions in effect at the time of this solicitation for all applicable codes, criteria, regulations and guidelines, all of which shall be made a part of the SOW.

**1.4.1 PROJECT SUPERINTENDENT/ALTERNATE:** Project Superintendent shall have five years general construction experience, minimum; shall be a high school graduate or GED equivalent, minimum and having held the same position on 3 prior like projects of equal or greater complexity and construction costs, minimum. The Superintendent and/or the Alternate shall be available five work [5] days per week, eight [8] hours per work day. The Superintendent's approved alternate shall meet the same criteria as the superintendent, shall be present and able to respond on the Superintendent's behalf when the Superintendent is not available.

**1.4.2 TESTING LABORATORY:** The Contractor shall employ and pay for services of an independent testing laboratory to perform specified services and testing. The testing laboratory shall meet "Recommended Requirements for Independent Laboratory Qualifications" published by the American Council of Independent Laboratories, meet basic requirements of ASTM E-329 and shall be currently licensed to operate in the State of Texas.

**1.4.2.1** Specific tests and inspections shall be as indicated in this SOW and the drawings.

**1.4.3 Geotechnical Engineer:** Provide the services of an independent Geotechnical Engineer to monitor the earthwork and perform specified testing of the earthwork.

**1.4.3.1** Specific testing shall be as follows:

**1.4.3.1.1** A minimum of at least one laboratory test for moisture-density relationship of the subgrade material in accordance with Texas Hwy Dept. test procedure TEX 113E.

**1.4.3.1.2** A minimum of at least one laboratory test for moisture-density relationship of the select fill per TEX 113E.

**1.4.3.1.3** A minimum of one field density test each 2000 SF for subgrade below Canopy Structure for "Density Control of Compaction" in accordance with latest ASTM D-2922 and ASTM D-3017.

**1.4.3.1.4** A minimum of one field density test each 2000 SF for select fill below Canopy

## ARMY TRAINING FIELD

Structure for “Density Control of Compaction” in accordance with latest ASTM D-2922 and ASTM D-3017.

1.4.3.1.5 A minimum of one field density test per lift each 200 LF of select fill within trenches for “Density Control of Compaction” in accordance with latest ASTM D-2922 and ASTM D-3017.

1.4.3.1.6 Any other tests specifically required by other sections, herein.

1.5.1 MANAGEMENT PLAN: The Contractor shall submit a Management Work Plan that fully describes the means to perform all work including but not limited to providing all equipment, tools, materials, supplies, transportation, supervision, management, proposed project schedules, work sequence plans, associated configurations for all demolition and new work including electrical, mechanical and communications infrastructure as described in the SOW.

1.5.2 TRAFFIC PLAN: The Contractor shall submit within 7 calendar days after (NTP) traffic and pedestrian plan showing pedestrian and traffic flow altered by demolition/construction and proposed alternate routing for approval by TGC. TGC shall approve the management plan before the Contractor shall commence any demolition/construction work.

1.5.3 FIRST WORK: After the work area is vacated and prior to starting construction operations, the first work performed by the Contractor shall be to fence in and secure his lay down area in accordance with Contractor’s staging plan. The fence shall be maintained at all times during demolition/construction and only be removed, with the Contracting Officer’s approval, at the conclusion of demolition/construction operations. Site to be approved based on review of Contractor’s proposed location. This fence shall be minimum 6’-0” high portable chain link with portable interlocking panels, pedestrian gate(s), and vehicular gate(s) per the Drawings.

1.5.4 STORAGE AREAS: There are no Goodfellow AFB furnished covered or secure storage areas. Limited storage shall be permitted at the discretion of TGC on a space available basis. If the Contractor requires additional temporary field office, storage, and other construction buildings required temporarily in the performance of the work, the additional space shall require written approval of the Contracting Officer. Plans showing temporary field office, storage, and other construction buildings shall be submitted by the Contractor for Government Approval (GA). Utilities at the storage area shall be available for Contractor use. Goodfellow AFB assumes no responsibility for lost or stolen materials, equipment, or tools, the security of which lies solely with the Contractor. Contractor shall keep their storage areas clean, neat, and orderly. Contractor shall mow grass and weedy vegetation when it reaches a height of 6 inches. Mowing shall be to a height of 3 inches. Mowing shall be accomplished with a rotary mower that leaves the clippings evenly distributed on the soil surface. Mowing shall be accomplished during periods and in a manner that the soil and grass shall not be damaged. Towed or self-propelled riding mowers shall not be operated within 3 feet of shrubs or trees. Contractor

## ARMY TRAINING FIELD

shall mow areas adjacent to shrubs and trees with hand propelled mowers. Temporary fencing used by the Contractor to delineate construction sites shall be securely anchored with tension wires and posts as required to prevent sagging and an unsightly appearance. Fencing shall be maintained by the Contractor in this manner throughout the life of the contract. Due to high winds in west Texas, Contractor shall take every precaution to preclude trash and materials from blowing off site.

1.5.4 OUTAGES: The Contractor, shall submit to 17 CES written notification regarding any and all utility outages 14 calendar days in advance of proposed outage. All water, power or communication outages shall be scheduled for weekends only.

1.5.5 CLEANING AND PROTECTION:

1.5.5.1 All construction debris, trash, dirt, etc. shall be immediately removed, at a minimum daily and as required, at the Contractor's expense in accordance with all local, state and federal environmental laws and regulations.

1.5.5.2 All areas shall be cleaned at a minimum daily and as required to maintain a professional appearance at all times.

1.4.11 The Contractor shall collect any and all trash, debris, refuse, garbage, etc., that is generated and place it in appropriate containers with lids or approved covers on a periodic basis or as directed by the Contracting Officer's representative. The aforementioned material shall be hauled from the site by appropriate means on a daily basis, unless otherwise approved by the Contracting Officer's representative. Disposal shall be outside the limits of Government property. Disposal shall be by sanitary landfill or other approved methods and shall conform to all local, state and Federal guidelines, criteria and regulations. Upon completion of the work, the Contractor shall leave the work site and storage area[s] in a clean, neat and workmanlike condition satisfactory to the Contracting Officer. It is anticipated that excavation, filling and plowing of roadways shall be required to restore the area to near natural condition that shall permit the growth of vegetation thereon. Restoration to the original contours shall be required unless otherwise directed by this SOW or by the Contracting Officer.

1.5.6 During the performance of the entire project, weekly progress/coordination meetings between the Government and Contractor shall occur. Meeting scheduling shall be determined by the TGC during the pre-construction meeting.

1.6 PERFORMANCE PERIOD: The Contractor shall have (120) calendar days to perform all work associated with this project.

1.7 WORK SCHEDULE: Workdays shall be from 0730 to 1630, Monday thru Friday; no weekend work shall be allowed unless approved by the Contracting Officer. If weekend work is required Contractor shall submit request in writing to Contracting Office a minimum of 72 hours in advance. The Contractor shall provide written notification to the Contracting Officer fourteen (14) calendar days lead time for work schedule.

1.8 WORK AREA ACCESS: Government escorts shall not be needed. The lowest level of security exists in general access areas.

1.9 CONCRETE TRUCKS: Cleaning out of concrete trucks on Goodfellow AFB shall be prohibited. Concrete truck chutes, only, shall be rinsed at the construction site. Wastewater and concrete from this rinse shall be collected in a high-density polyethylene (HDPE) plastic-lined box or pit provided by the Contractor at the site. At the end of pouring operations, the Contractor shall excavate all the waste and liner and properly dispose of same. The Contractor shall dispose of all concrete debris to an authorized off base site and shall remove any and all concrete debris and residue at the end of the project at no additional cost to the Government. The pit shall be completely backfilled and the site restored to original conditions.

1.10 REFERENCES: All publications listed herein shall be the most current editions in effect at the time of solicitation and form a part of this Statement of Work. The publications shall be referred to in the text by basic designation only and include the following:

GAFB INSTRUCTION

GAFBI 32-2001 Goodfellow AFB Base Fire Protection  
Program GAFBI 31-102 Installation Security Instruction

INTERNATIONAL BUILDING CODE [IBC]

INTERNATIONAL FIRE CODE [IFC]

NATIONAL ELECTRIC CODE [NEC]

US ARMY CORPS OF ENGINEERS HEALTH AND SAFETY MANUAL EM 385-1-1

OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION

(OSHA) OSHA STD 29 CFR 1910 and 1926

OSHA STD 29 CFR 1910.252 Welding, Cutting and Brazing (General Requirements)

AMERICAN CONCRETE INSTITUTE [ACI]

AMERICAN COUNCIL OF INDEPENDENT LABORATORIES [ACIL]

AMERICAN SOCIETY FOR TESTING AND MATERIALS [ASTM]

AMERICAN SOCIETY OF CIVIL ENGINEERS [ASCE]

RFP 21-005: GAFB DEAAG CONSTRUCTION - CANOPY STRUCTURES & PT FIELD

ARMY TRAINING FIELD

MASTER PAINTER'S INSTITUTE [MPI]

TEXAS DEPARTMENT OF TRANSPORTATION [TxDoT]

UNDERWRITERS LABORATORY [UL]

UL 580, Class90 Tests for Uplift Resistance of Roof Assemblies

US ARMY CORPS OF ENGINEERS HEALTH AND SAFETY MANUAL EM 385-1-1

OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION

(OSHA) OSHA STD 29 CFR 1910 and 1926

OSHA STD 29 CFR 1910.252 Welding, Cutting and Brazing (General

Requirements) AMERICAN CONCRETE INSTITUTE [ACI]

1.11 SUBMITTALS: The Contractor shall provide submittals in the form of manufacturer's data, certificates of compliance and samples for all items provided and installed per the attached AF Form 66. The Contractor shall not be permitted to perform any work on site without approved submittals. The submittals listed on the attached AF Form 66 shall be required and shall be submitted for Government Approved (GA) or For Information Only (FIO). AF Form 3000 shall be used to process submittals. Submit four copies of submittals to Contracting Officer. Execute DD Form 1354 Checklist and submit to Contracting Officer before final payment is issued.

1.11 MANUFACTURER'S CATALOG DATA: Data composed of catalog cuts, brochures, circulars, specifications and product data, and printed information in sufficient detail and scope to verify compliance with requirements of the contract documents.

1.12 SAMPLES: The Contractor shall submit actual nominally sized samples of the roof panels: R-Panels, and U-Panels; gutter and downspout, synthetic surface, synthetic turf, synthetic basketball surface, roof deck and paint color samples for approval. The Contractor shall submit a sample in each color of the product. No products or materials shall be installed until respective submittals have been approved.

1.13 CONTRACTORS WARRANTY: The Contractor shall warrant all equipment, materials and workmanship for a period of one [1] year after project completion. Any manufacturer and/or specified warranty that is for a period longer than the one [1] year Contractor warranty shall be so warranted. At a date one month prior to termination of the one [1] warranty, the Contractor and the Government shall review all installed equipment, materials, workmanship and the Contractor shall make repairs and/or replacements of defective warranty items.

1.12 MANUFACTURERS WARRANTY: The Contractor shall identify all items being installed that are covered by a manufacturers guarantee or warranty and provide validated copies of such. The identification shall list the name of the company and the

expiration date of the guarantee or warranty.

**1.15 DELIVERY AND STORAGE:** All equipment and materials delivered and placed in storage shall be stored per manufacturer's recommendations and with protection from the weather, humidity and temperature variation, dirt and dust, and any other contaminants. Store all materials in a secure, clean and dry location.

**1.16 SAFETY:** All Contractor operations shall be conducted and performed in accordance with Department of Labor, OSHA requirements found in 29 CFR 1910 (1910.146 and 1910.147) and 29 CFR 1926, and Air Force Occupational Safety & Health (AFOSH) standards including AFI 91-203, Air Force Consolidated Occupational Safety Instruction. The Contractor shall also ensure that all work shall be performed in accordance with project identified national standards, military manuals, instructions, pamphlets, standards, and handbooks, and with the edition in effect on the date of this solicitation of the Corps of Engineers (COE) Safety Manual 385-1-1. All job sites shall be subject to inspections by the Department of Labor. In the event of conflicts between the OSHA standards and these requirements, the most stringent shall apply.

**1.16.1** Resolution of Department of Labor citations for violations of Occupational Safety and Health Standards is a Contractor responsibility and shall provide for no basis of a claim against the Government.

**1.17 TEMPORARY FENCE:** Prior to the start of any work for this project, the Contractor shall provide temporary barricades on the road where the work begins. There shall be no need to fence off the perimeter.

**1.20 FIELD OFFICE:** The Contractor shall maintain a clean, secure, weather-tight, temporary portable field office placed on site with all required services during the duration of the project.

**1.21 PORTABLE TOILETS:** For the duration of this project, the Contractor shall provide and properly maintain portable toilet[s] on site for the use of the workers.

**1.22 CONSTRUCTION DOCUMENTS:** The Contractor shall maintain a complete, current set of the construction documents and daily project log[s] in the field office at all times.

**1.18 OPERATIONS SECURITY (OPSEC) REQUIREMENTS:** The purpose of OPSEC is to reduce the vulnerability of Air Force missions by eliminating or reducing successful adversary collection and exploitation of critical or sensitive information. OPSEC shall apply to all activities that prepare, sustain, or employ forces during all phases of operations. OPSEC shall be a process of identifying, analyzing and controlling critical and sensitive information indicating friendly actions associated with military operations and other activities to: 1) identify those actions that can be observed by adversary intelligence systems; 2) determine what specific indications could be collected, analyzed, and interpreted to derive critical or sensitive information in time to be useful to adversaries; 3) select and execute measures that eliminate or reduce to an acceptable



## ARMY TRAINING FIELD

level the vulnerabilities of friendly actions to adversary exploitation.

Organizations and personnel supporting the 17th Training Wing have OPSEC requirements associated with their activities and support. The Contractor shall comply with the 17th Training Wing OPSEC Program and during the construction contract pre-construction meeting further information shall be provided by the Government on the Goodfellow AFB OPSEC Program. The basis for the OPSEC program is AFI 10-701.

#### 1.18.1 SPECIFIC REQUIREMENTS:

1.18.1.1 Contractor personnel shall receive OPSEC Awareness Education and Duty-Related Training within 90 days of contract start date and annually thereafter.

1.18.1.2 OPSEC Awareness Education and Training shall be provided or coordinated through government channels.

1.18.1.3 The Contractor shall be susceptible to OPSEC assessments, surveys or any other evaluation tool available for the Wing OPSEC Program Manager or subordinate OPSEC Coordinator to use in order to gauge the effectiveness of the overall program.

1.19 UTILITY CONSERVATION: The Contractor shall be required to participate in government energy conservation programs. For the purpose of this contract, utilities such as water, electricity, etc., shall be furnished by the government at no cost to the Contractor. Long distance and Defense Switched Network (DSN) telephone services shall not be provided.

1.20 WORK SCHEDULE: Working hours for the Contractor shall normally be between the hours of 7:30 A.M. and 4:30 P.M. excluding Saturdays, Sundays, and Federal holidays. Refer to Section H of the solicitation/contract document for further information on working days. If the Contractor desires to work during periods other than above, a request shall be made to the Contracting Officer in writing four (4) calendar days in advance of his/her intention. If the required base personnel are reasonably available, the Contracting Officer shall authorize the Contractor to perform work during periods other than normal duty hours/days.

1.21 NORMAL WORK HOURS: The Contractor shall schedule all work to commence between the hours of 7:30 AM and 4:30 PM, Monday through Friday, except on the Federal holidays and days designated as "Family Days" by Air Education and Training Command (AETC) as listed below. Permission to work outside these normal business hours shall be granted by the Contracting Officer. Requests to work outside the normal work hours shall be submitted in writing to the Contracting Officer at least 3 working days in advance of the date requested.

		2020	2021
New Year's Day	01 Jan		
Martin Luther King's	3rd Monday in January		
President's Day	3rd Monday in February		

## RFP 21-005: GAFB DEAAG CONSTRUCTION - CANOPY STRUCTURES &amp; PT FIELD

## ARMY TRAINING FIELD

Memorial Day	Last Monday in May	25 May	24 May
Independence Day	4 Jul	05 Jul	05 Jul
Labor Day	1st Monday in	07 Sep	06 Sep
Columbus Day	2nd Monday in October		
Veterans Day	11 Nov		
Thanksgiving Day	4th Thursday in	26 Nov	25 Nov
Christmas Day	25 Dec		

While AETC Family Days have not been identified past calendar year 2018 it is anticipated that the same number of AETC Family days shall be declared each year.

Any Holiday falling on a Saturday shall be observed the preceding Friday. Any Holiday falling on a Sunday shall be observed the following Monday.

The base could be closed because of security problems, adverse weather, or other events. Unless otherwise notified by the Government, the Contractor shall monitor local television stations, radio stations, or Goodfellow's Facebook page for notification of a possible base closure or late opening. The Contractor shall not receive any other form of notification of a base closure from the Government, unless contacted by the Contracting Officer (CO) or the COR. The Contractor shall be responsible for employee notification. Contractor(s) shall not report when the base is closed due to security problems and/or adverse weather.

1.22 TOBACCO USE IN AETC FACILITIES: Contractors are advised that the Commander has placed restrictions on the smoking of tobacco products in AETC facilities. AFI 40-102, Tobacco Use in the Air Force, outlines the procedures used by the commander to control smoking in our facilities. Contractor employees and visitors shall be subject to the same restrictions as government personnel. Smoking shall be permitted only in designated smoking areas. Additional information, to include locations of designated smoking areas, shall be provided to the Contractor at the pre-performance conference.

1.23 BASE ACCESS SECURITY REQUIREMENTS: The Contractor shall comply at all times with base law enforcement and security requirements to include base pass requirements.

1.24 Contractor Installation Access Pass. Before arrival, a Government identification card-holding person from the sponsoring agency, Base Contracting office/administrator or applicable local project manager shall submit a request for base access using the 17 Training Wing's Base Access List (BAL) memorandum as a form of registration for each credential applicant. The base sponsor/sponsoring agency/Contracting Officer and the contracted management team shall establish an accountability process to account for each applicant, to oversee the BAL process, and to retrieve installation passes when access is no longer required. Base sponsors/sponsoring agencies or contract officers shall ensure the BAL is accurate, it is signed and forwarded to the 17 SFS Pass &

## ARMY TRAINING FIELD

Registration section for completion of the vetting and fitness determination processes. The BAL shall be delivered to Pass & Registration, located at the Visitor Control Center (VCC). When delivery is not possible, the BAL shall be forwarded to Pass & Registration via a ".mil" email account located on Goodfellow AFB. The BAL shall include pertinent visitor information, reason for entry, frequency of entry, destination, times each day requiring entry, and duration of request.

Contractor Initial (and periodic) Installation Access Screening. The Contractor shall provide Pass and Registration with two forms of identification, one of which shall be a state issued photo identification. Prior to being allowed access, a minimum of a background/National Crime Information Center (NCIC) check shall be completed on all Contractors, requesting unescorted access for official business. This screening process shall validate the Contractor's suitability to visit Goodfellow and certify that the Contractor shall not pose an increased threat to the base populace. The Contractor shall then be issued a temporary Defense Biometric Identification System (DBIDS) pass or AF Form 75A through the expiration date on the BAL request. Possession of an authorized access pass shall not automatically authorize or guarantee access to the installation. The individual shall still have a valid purpose to be on the installation and properly sponsored, as applicable.

1.24.1 Access Denial. If it is determined a Contractor requesting access has been convicted of a felony or pled guilty to a felony charge within the past 10 years, or is considered not fit to obtain authorized access based on the information obtained during the identity vetting, or criminal history indicates the individual shall present a threat to the good order, discipline and morale of the installation, Security Forces personnel shall deny entry. The Contractor shall be informed of the access denial, shall be issued an Access Denial Letter, and shall be informed on how they shall appeal this order.

Access Denial Appeal Process. When denied access, contract visitors shall be informed to report back their manager. If the contract worker and management are considering an appeal, it shall be submitted by letter to the 17 SFS Commander, within 30 days of access denial. The contract manager shall first contact the military contract officer/administrator or on-base sponsor for additional guidance and clarification. The appeal shall be delivered to the installation Visitor Control Section or mailed to Security Forces, addressed to 17 SFS/CC, 361 Apache Trail, Goodfellow AFB, 76908. The Contractor's appeal shall discuss all facts and reasons to support rescinding access denial. The 17 TRW/CC shall approve/disapprove all appeals for entry.

1.24.2 For installation access on non-duty hours or down days: Identify which workers need access on weekends, Federal holidays/family days, and down days, where required.

Ensure only workers that are already vetted are on the Extended-Hours request (no new personnel). New personnel require a new BAL and formal vetting. Complete the "After Hours" BAL for workers requiring down day access to the installation.

RFP 21-005: GAFB DEAAG CONSTRUCTION - CANOPY STRUCTURES & PT FIELD  
ARMY TRAINING FIELD

Identify the vehicle requirements. If operations cannot support the search procedures for large vehicles/special purpose equipment, the request shall be declined unless arrangements are made to deliver the vehicle/equipment prior, during normal duty hours.

During the above-mentioned days, the Contract officer, contract representative sponsoring ID cardholder shall be required to be present during hours of the work request.

1.24.3 All BALs shall be accomplished each time employees or personnel change, not to exceed 180 days. Oversight for BAL updates and establishment of procedures to ensure Physical Access Control System (PACS) credentials and locally created access credentials from individuals who no longer require installation access shall be the responsibility of the contracting officer/contract administrator.

When an employee (regardless of position) is no longer employed by the Contractor or Sub-Contractor all DBIDS passes shall be to be returned to the Contract Officer/Administrator or to the Visitor Control Center. If a local issued access credential/pass is not returned, the contract officer shall withhold funds or the Installation Commander shall consider permanent debarment to the installation. Immediate access denial shall be initiated by Pass & Registration updating the DBIDS database until disposition of the DBIDS pass shall be resolved.

## PART 2.0 – PRODUCTS:

2.1 REFERENCES TO MATERIALS, MANUFACTURERS AND PRODUCTS: Materials shall be the standard product of manufacturer's regularly engaged in the manufacture of such products. The products furnished shall meet the quality and specifications indicated in this SOW and the Drawings, minimum. The Contractor shall visit the premises to become thoroughly familiar with details of the work and working conditions, verify dimensions in the field, and shall advise the Contracting Officer of any discrepancies before commencing the work for this project.

2.3 Geotechnical Report: There is a Geotechnical Report for the Physical Training Field that is inclusive of this SOW.

2.11 CAST-IN-PLACE CONCRETE CRITERIA [Provide a Design Mix submittal in accordance with the following criteria for approval prior to concrete work for this project]:

2.11.1 Concrete Slab on Grade, etc:

2.11.1.1 3/4" maximum coarse aggregate.

2.11.1.2 28 day compressive strength of 3000 psi, minimum.

2.11.1.3 Maximum water to cementitious material ratio of 0.53.

2.11.1.4 Slump between 3" minimum and 4 ½" maximum.

2.11.1.5 Air Content between 2% minimum and 4% maximum.

2.11.1.6 Use of Fly-ash and/or Ground-Granulated-Blast-Furnace-Slag shall be limited to 20% substitution by weight of cement.

2.11.1.6 Addition of water to batched concrete at the job site shall be limited to circumstances when the workability of delivered concrete is insufficient for practical placement and all of the water allowed by the mix design has not been added at the start of mixing. In no case shall the specified water to cementitious material ratio or slump be exceeded. Before any concrete shall be placed from the batch, a slump test shall be performed. Under no circumstances shall water be added to the concrete mixture after the slump test has been performed and the slump is within the specified limits indicated herein. Slump test shall be performed by an approved testing company with a standard slump cone in accordance with ASTM C-1611 recommendations.

2.11.1.7 Strength test cylinders shall be provided by Contractor by an approved testing agency on specimens that are representative of the work and which have been water soaked for at least 24 hours prior to testing. Specimens shall consist of not less than three inch diameter cores or 3 inch cubes. A minimum of three [3] test cylinders shall be made for each pour, one each at approximately the beginning, middle and near the end of each pour.

2.3.2 Reinforcing Steel: The Contractor shall provide new billet steel reinforcing conforming to ASTM A-615, ACI-315 and ACI-318 Grade 60, minimum. All reinforcing shall be continuous unless indicated otherwise. Stagger splices. Provide dowels matching size and spacing of main reinforcement, where required.

2.3.3 Formwork: Formwork shall be designed in accordance with the methodology of ACI 347R for anticipated loads, lateral pressure and stress. Form releasing agents shall be commercial formulations that shall not bond with, stain or adversely affect concrete surfaces. Forms shall be removed in a manner to prevent injury to the concrete and ensuring the complete safety of the structure. Formwork shall be removed when the concrete has attained sufficient strength to resist damage from the removal process, but not before 72 hours has elapsed minimum since the concrete placement.

2.3.4 WIRE TIES: The Contractor shall provide 6 inch-16 gauge steel rebar tie-wire at reinforcing bar cross members and at overlapping ends of reinforcing bar.

2.4 FLEXIBLE BASE MATERIAL: The Contractor shall provide an aggregate base of crushed limestone consisting of TxDoT Type A, Grade 1 limestone, compacted to 96% Standard Proctor Density within 2% points of the optimum moisture content. Material shall be placed in four-inch maximum lifts, below finish surface material. Compaction testing shall be provided in accordance with this SOW and submitted by the Contractor prior to

placing asphalt paving.

**2.6 DRAIN STONE FOUNDATION:** The Contractor shall provide and install 6 inch (nominal thickness) drain stone mix, grade and compact to proper density or approved equal. A compaction test shall be submitted by the Contractor prior to placing Matrix Synthetic Turf or proved equal. Reference Drawings.

**2.7 FIELD LOCK/TURF LOCK ADHESIVE:** The Contractor shall provide and install field lock adhesive bonding or approved equal. The Contractor shall provide and install turf lock reinforced rivets for field marking locations or proved equal. Refer to drawings for details.

**2.8 MATRIX SYNTHETIC TURF:** The Contractor shall provide and install Matrix Synthetic Turf System or proved equal to include: running lane lines and lane numbering tufted and inlaid in white turf, pea gravel, proprietary "Real fill" installation of selected aggregate and cubodial "SBR" rubber, Matrix turf coated with polyurethane, 1 tow-behind ground driven sweeper, owner care and maintenance orientation, GMAX testing (force when land parameter), and provide a 8 year manufacturer warranty.

**2.13 COATINGS:** "Coating" shall be the general term for material and process. "Paint" shall be defined as a mixture of a solid pigment suspended in a liquid which when applied to a surface dries to a protective and decorative coating. "Stain" shall be defined as a color in a dissolving vehicle that when spread on a surface penetrates to provide color within the surface. Coatings and practices shall comply with federal clean air standards. Lead-based metal primers and/or paints containing lead shall not be permitted and/or used in any coatings. Mecurial Fungicides shall not be permitted and/or used in any coatings. Volatile organic compounds [VOC] shall meet current VOC regulations. All coatings shall comply with the 'Approved Product List' of the Master Painter's Institute [MPI]. Provide MSDS for this item.

#### **2.14 ELECTRICAL:**

**2.14.1 VOLTAGE DROP:** The Contractor shall provide and install voltage drop at project location. See drawings for details.

**2.14.2 EXTERIOR LIGHT POLES:** The Contractor shall provide and install exterior lighting poles with a concrete base as described in the drawings. Acceptable manufacture is Light Poles Plus or approved equal. Ref: drawings.

**2.14.3 EXTERIOR LIGHT FIXTURES:** The Contractor shall provide and install high output LED sports and flood light fixtures as described in the plans. Acceptable manufacture is Light Poles Plus or approved equal. Refer to product specifications and drawings for details.

**2.14.4 EXTERIOR RECEPTACLES:** The Contractor shall install weatherproof outlets

RFP 21-005: GAFB DEAG CONSTRUCTION - CANOPY STRUCTURES & PT FIELD  
ARMY TRAINING FIELD

(ground fault) for future use of equipment as described in the drawings.

2.14.5 TRANSFORMER: The Contractor shall provide and install small dry transformer. See drawings for details.

2.14.6 TIMER: The Contractor shall provide and install an astronomic dial timer for the lights.

2.14.7 UNDERGROUND PRIMARY: The Contractor shall install #6 THHN copper wire with nonmetallic flexible tubing. See drawings for details.

2.14.8 UNDERGROUND SECONDARY: The Contractor shall provide and install #12 THHN copper wire with nonmetallic flexible tubing. See drawings for details.

2.14.9 ELECTRICAL PANEL: The Contractor shall provide and install a three phase, distribution panel. Refer to drawings for panel schedule and details.

2.14.10 BREAKER: The Contractor shall provide and install single pole breaker in the panel with an "on off" selector switch.

2.14.11 DISCONNECT SWITCH: The Contractor shall provide and install new combination lighting panel/disconnect switch for exterior lighting. Both panel and disconnect switch shall be controlled by a single photo-cell and a manually operated 120 minute timer.

2.18 HYDRO-MULCHING: Localized Hydromulching shall be accomplished only when satisfactory results can be expected. Hydromulching shall be performed on all areas indicated on the drawings. Localized placement of topsoil shall be in direct association with localized Hydromulching regarding surface area processed.

2.18.1 Materials used in the Hydromulching operation shall be of the best quality available and consist of the following:

- 2.15.1.1 Grass – Applied from Shall 1st to September 1st
- 2.15.1.2 Conweb – 2000 wood cellulose fiber
- 2.15.1.3 Hulled Bermuda grass seed
- 2.15.1.4 8-8-8-fertilizer

2.18.2 The mixture shall be applied at the following rate:

- 2.15.2.1 50 pounds Conweb per 1000 square feet
- 2.15.2.2 2 pounds Bermuda grass seed per 1000 square feet
- 2.15.2.3 7 gallons liquid fertilizer per 1000 square feet, or
- 2.15.2.4 70 pounds granular fertilizer per 1000 square feet

2.18.3 Hydromulching shall be applied free from noxious weeds and undesirable plants,

## ARMY TRAINING FIELD

stones, roots of trees and other materials that hinder development and maintenance. Water shall be free from oil, acid, alkali salt and other substances that are harmful to growth of grass. Water shall be source approved prior to usage.

2.9.17 Replanting: Areas on which a stand of growing grass is not present in a reasonable length of time shall be hydromulched again in accordance with the appropriate planting season and shall continue to be hydromulched and maintained throughout the maintenance period until an acceptable stand is obtained. A stand shall be defined as live grass plants from hydromulching occurring over 95% of the area, with no more than 10 square feet left uncovered in any one place.

2.9.19 MAINTENANCE GRADES AND EROSION REPAIR: It shall be the responsibility of the Contractor to maintain the established grades of the lawn areas after the commencement of planting operations and during the specified maintenance period. Any damage to the finished surface from Contractor's operations shall be promptly repaired. In the event erosion occurs from either watering operations or from rainfall, such damage shall be promptly repaired. Ruts, ridges, tracks, and other surface irregularities shall be corrected and the areas replanted, where required, prior to acceptance.

### PART 3.0 – EXECUTION:

3.1 GENERAL: All work shall be performed as indicated this SOW and the Drawings and in accordance with the manufacturer's diagrams and instructions, unless otherwise specified. The Contractor shall field verify all dimensions and site conditions. Price increase adjustments to the original contract price shall not be issued because the Contractor was not aware of existing conditions. The Contractor shall provide all labor, materials, tools and equipment required to perform all dismantling, repairs and installation as listed in this statement of work and the drawings.

1.13 PRODUCT DATA: Provide Manufacturer's installation and maintenance instructions for all products.

1.14 AS BUILT DRAWINGS: Following the project completion or turnover, within 14 days the Contractor shall furnish 2 redline sets of mark up as built drawings to the Contracting Officer. The statement "As-Built" and date shall be clearly marked at the lower right-hand corner of each drawing sheet.

2.4 SITE EXCAVATION: Strip topsoil and excavate regardless of material encountered, within the grading limits as described in the drawings. Select fill material excavated shall be transported to and placed in fill areas within the limits of the work. All unsatisfactory material including any soil which is disturbed by the Contractor's operations or softened due to exposure to the elements and water and surplus material shall be removed from the base. In no circumstance shall dumping of unsatisfactory material be allowed on base. In the event that it is necessary to remove unsatisfactory material to a depth greater than specified, the Contracting Officer shall be notified. Unsatisfactory material



## ARMY TRAINING FIELD

excavated below the grade shown and replaced with satisfactory material as directed shall be at no additional cost to the Government. Excavations carried below the depths indicated, without specific directions, shall, except as otherwise specified, be refilled to the proper grade with satisfactory material as directed. All additional work of this nature shall be at the Contractor's expense. Excavation and filling shall be performed in a manner and sequence that shall provide drainage at all times. Excavations shall be kept free from water while work therein is in progress. Material required for fills in excess of that produced by excavation within the grading limits shall be obtained from borrow areas. Dispose of all materials in accordance with Part 5.

**2.5 PREPARATION OF GROUND SURFACE FOR FILL:** All vegetation, such as roots, brush, heavy sods, heavy growth of grass, and all decayed vegetable matter, rubbish, and other unsatisfactory material within the area upon which fill is to be placed, shall be stripped or otherwise removed before the fill is started. In no case shall unsatisfactory material remain in or under the fill area. Sloped ground surfaces steeper than one vertical to three horizontal on which fill shall be to be placed shall be plowed, stepped, or broken up, as directed, in such manner that the fill material shall bond with the existing surface. Prepared surfaces on which compacted fill shall be to be placed shall be wetted or dried as shall be required to obtain the specified moisture content and density.

**3.2 INSTALLATION:** All work shall be done with the athletic field areas occupied and the work area unoccupied. The Contractor shall coordinate with the Contract Inspector prior to start of work.

**3.3** The Contractor shall construct an Army Physical Training Field as described on this statement of work and drawings. The Army Physical Training Field shall have Matrix Synthetic Turf system, area lighting/electricity, and site work to include construction of connecting sidewalk and a concrete slab for bleachers. If any departure from the SOW shall be deemed necessary by the Contractor, details of such departures and the reasons therefore shall be submitted as soon as possible to the Contracting Officer, or designated representative for action. No such departures shall be made without prior approval of the Contracting Officer, or designated representative.

**2.13 BACKFILL MATERIAL:** All topsoil and backfilling material necessary to complete the work shall be obtained from topsoil stockpiles from grading and excavating operations and from approved topsoil sources off of Government controlled property. It shall be free from tree roots, stones, shale, parent and other materials that hinder grading, planting, plant growth and maintenance operations, and free from noxious and other objectionable weed seeds and toxic substances.

**1.5.7** The Contractor shall be responsible for requesting a final inspection from TGC. At the contract final inspection, there shall be a joint Government (Goodfellow AFB & TGC) Contractor inspection to include operational testing of all building systems including lighting and ceiling fans to ensure all systems are operable.

**PART 4.0 – UTILITY OUTAGES AND SPECIAL CONDITIONS:**

**4.1 BASE CIVIL ENGINEERING WORK CLEARANCE REQUEST:** The Contractor shall obtain and process AF Form 103 for approval prior to commencement of work for this project. The Contractor shall have this approved form on the job site at all times.

**4.1.1** Due to the requirement for multiple agencies to coordinate on these requests, expect 7 – 10 days for paperwork processing. Contractor requests shall be submitted at the earliest possible date to preclude delays.

**4.2 UTILITY OUTAGES:** When a utility outage shall be necessary to perform the contract work in an occupied facility, regardless of whether the work area is occupied, the outage shall be performed by the Contractor during non-duty hours at no additional cost to the Government, unless otherwise approved by the Contracting Officer. The Contractor shall notify the Contract Inspector of outage requirements to include buildings affected; length of outage; and reasons for outage. The Contractor shall allow affected occupants a minimum of two – (2) weeks' notice prior to outage. The Contractor shall also be required to provide the Contracting Office a written notification of the requested outage.

**4.3 BASE FIRE REGULATIONS:** The Contractor shall comply with Base Fire Regulations as set forth in the latest edition of GAFB Instruction 32-2001, titled "Base Fire Protection Program". The Contractor shall use no explosives or fire in performing the work. All work shall be in strict compliance with all National Fire Codes.

**4.4 LOCKOUT/TAGOUT, HAZARDOUS ENERGY CONTROL:** In addition to the requirements in OSHA Std. 1910.147, if a Contractor needs to lock or tag something out, the Contractor shall ensure that affected employees are notified before and after the locks and tags are used.

**PART 5.0 - ENVIRONMENTAL REQUIREMENTS:**

**5.1 COMPLIANCE WITH LAWS:** Construction activities shall NOT exempt from air emission, storm water, hazardous waste, and other environmental compliance rules and regulations. The Contractor shall comply and ensure that all Sub-Contractors comply with all applicable federal, state, and local laws, regulations, ordinances and standards related to environmental matters.

**5.2 PROTECTION OF HISTORICAL AND ARCHAEOLOGICAL RESOURCES:** All known Historical, Archaeological, and Cultural Resources within the Contractors work area shall be designated on the contract Technical Exhibits. The Contractor shall take precautions during the contract to preserve all resources, as they existed at the time of contract award and comply with the Archaeological and Historic Preservation Act (AHPA) and the Archaeological Resources Protection Act (ARPA). The Contractor shall provide all protective devices such as off-limit markings, fencing, barricades or other

## ARMY TRAINING FIELD

devices as needed and shall be responsible for preservation of the sites during this contract. All items having any potential historical or archaeological interest outside of designated areas, which are discovered in the course of any construction activities, shall be carefully preserved. The Contractor shall protect the find in-place by leaving the archaeological find undisturbed and by using flags to mark a 50-foot radius area around the find. The find shall be immediately reported to the Contracting Officer so that the proper authorities shall be notified. All work shall be stopped in the immediate area of the discovery until directed by the Contracting Officer to resume work. Any work required to preserve or protect these finds shall be accomplished before work resumes.

**5.3 HAZARDOUS AND SPECIAL WASTES GENERATED BY THE CONTRACTOR:** The Contractor shall identify, characterize, containerize, store and dispose of hazardous wastes in strict accordance with federal guidelines found in the Code of Federal Regulations, Title 40 (40 CFR) parts 260-270, state regulation 30 TAC 335, all local guidelines, and as specified. A Uniform Hazardous Waste Manifest shall be used by the Contractor to document all parties and locations involved in the transportation, storage and disposal of all hazardous and special wastes. This form shall be provided to the government by the Contractor and signed by the Base Environmental Coordinator (CEIE) before the waste shall be transported from the limits of government property. A copy of the manifest shall be signed by the receiver of the waste and submitted to the Contracting Officer not later than forty-five days after disposal has taken place. Hazardous waste treatment, storage and disposal facility shall be located within in the state of Texas, permitted by the U.S. EPA, and approved by CEIE.

**5.4 CONTRACTOR ENCOUNTERED HAZARDOUS WASTE:** The Contractor shall notify the Contracting Officer's Representative and CEIE upon encountering any material not identified in this Statement of Work thought to be hazardous that could jeopardize the safety of workers or personnel in the area. The Government shall be responsible for characterization, transportation, storage and disposal of the waste if necessary.

**5.5 ASBESTOS:** To the best of the Government's knowledge, no asbestos-containing material (ACM) shall be encountered during this project. Shall the Contractor encounter previously unidentified or suspected ACM, which shall be disturbed to comply with the contract documents, the Contractor shall cease that work which would disturb the suspect material and shall immediately notify the Contracting Officer. The Government shall take appropriate measures to ascertain the material's composition and determine any remedial actions necessary.

**5.5.1 Asbestos Containing Building Materials:** Under no circumstances, under the provisions of this contract, shall the Contractor be allowed to provide asbestos containing building materials, or products containing encapsulated asbestos or mineral fibers as defined in the 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants of 1990, to GAFB.

**5.6 HAZARDOUS MATERIALS:** The Contractor shall provide the Contracting Officer

## ARMY TRAINING FIELD

with an AF Form 3000, Material and Approval Submittal, listing all materials to be utilized during the contract. If any of the material is classified as hazardous in accordance with AFI 32-7086, the Contractor shall submit an AF Form 3952, (Chemical/Hazardous Material Request Authorization) for each material item with all supporting information as required for approval. The Contractor shall obtain authorization from the Contracting Officer prior to bringing or using hazardous materials on the installation. The Contractor shall supply an up-to-date SDS for each requested AF Form 3952 item listed as a hazardous material, as defined to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the SDSs submitted under this contract. The Contractor shall maintain an onsite file of all SDSs. As determined by the Contracting Officer, either on a monthly basis or at the end of the contract, the Contractor shall submit for approval by the Contracting Officer (via AF Form 3000), a Contractors Hazardous Materials Usage Report (2 copies) indicating usage of HAZMAT materials within the contract period on GAFB. No hazardous materials, lubricants, oils, liquids or related materials shall be deposited in the refuse containers on base.

**5.7 NUISANCE AND POLLUTING ACTIVITY PROHIBITED:** Polluting, dumping, or discharging of any harmful, nuisance, or regulated materials (such as but not limited to concrete truck washout, vehicle maintenance fluids, residue from saw cutting operations, solid waste and hazardous substances) into building drains, site drains, streams, waterways, holding ponds or to the ground surface shall not be permitted and the Contractor shall be held responsible for any and all damages which shall result. Further, the Contractor shall conduct work activities in such a fashion as to avoid creating any legal nuisance, including but not limited to, suppression of noise and dust, control of erosion, and implementation of other measures as necessary to minimize impacts of work activities.

**5.8 RELEASE OF FLUIDS TO THE SANITARY SEWER SYSTEM:** Goodfellow AFB's sanitary sewer system discharges into the Publicly Owned Treatment Works (POTW) operated by the City of San Angelo, Texas. This POTW has established testing requirements for certain constituents as well as discharge limits of those same constituents. Accordingly, any Contractor performing work at Goodfellow AFB and contemplating a release of non-hazardous water into the sanitary sewer system shall meet the pretreatment standards and comply with the testing/release requirements established by the City of San Angelo. The Contractor shall also be responsible for all testing, monitoring, measuring, documenting, etc. to verify this compliance. Contractor shall not discharge wastewater to base's sanitary sewer without prior approval of the Government.

**5.10 AIR EMISSIONS:** Media blasting shall require registering the construction activity under state regulation 30 TAC 106.452. The Contractor shall prepare the state form PI-7 for signature approval by the base prior to start of construction. The Contractor shall meet all provisions of the Permit-By-Rule.

## ARMY TRAINING FIELD

5.11 DRINKING WATER: For all drinking water disruptions, the Contractor shall adhere to 30 TAC 290 Subchapter D paragraph 290.46(g and j). Submit an analysis report and a "Drinking Water Customer Service Inspection checklist" via an AF Form 3000 for Government Approval. Contact Bioenvironmental Engineering at (325) 654-3126 prior to restoring drinking water service.

5.12 PROTECTION OF WATER RESOURCES: All work under this contract shall be performed in such a manner that objectionable or nuisance conditions shall not be created in lakes, reservoirs, streams or storm water conveyances through or adjacent to the project areas. The Contractor shall comply with the terms and conditions of Texas Pollutant Discharge Elimination System (TPDES) Construction General Permit, TXR150000 (GCP). At least 30 days prior to the start of construction, the Contractor shall seek coverage under the GCP for storm water and non-storm water discharges associated with his construction activities.

5.12.1 For all soil disturbance of more than 1 acre, the Contractor shall prepare a Storm Water Pollution Prevention Plan (SWP3) meeting all requirements specified in the GCP and shall include the Contractor's Best Management Practices for erosion and sedimentation control at the site. This plan shall be submitted for Government approval (GA).

5.12.2 Regardless of the amount of soil disturbed, all non-storm water discharges from Contractor's site shall conform to TPDES General Permit TXR040000 for Small Municipal Separate Storm Sewer Systems (MS4).

5.12.3 If a Notice of Intent (NOI) is required for permit coverage, the Contractor shall submit the NOI to the state and provide copies to the Government via Form 3000 FIO. Contractor shall make required MS4 notifications to the City of San Angelo and the base. Copies of all notifications shall be provided to the Contracting Officer via Form 3000 FIO. Contractor shall be responsible for fees associated with obtaining coverage under the GCP.

5.12.4 The Contractor shall also file a Notice of Termination (NOT) TCEQ Form 20023 promptly after site stabilization in accordance with the general permit is achieved. These forms shall be found at the TCEQ website (<http://www.tceq.state.tx.us>). The prime Contractor's principal shall sign to certify the NOI/NOC/NOT or Construction Site Notice. A copy of the NOT shall be provided to the Contracting Officer and Base Environmental Coordinator, FIO.

5.12.5 The Government shall specify if the contracted project shall be part of a larger common development requiring additional storm water measures be taken to obtain permit coverage, or if the project area of construction shall be greater than 5 acres.

5.12.6 Post-Construction Cleanup or Obliteration: The Contractor shall obliterate all evidence of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess materials, or any other

## ARMY TRAINING FIELD

vestiges of construction. It shall be anticipated that excavation, filling, and plowing of roadways shall be required to restore the area to near natural conditions, which shall permit the growth of vegetation thereon. The disturbed areas shall be graded and filled as required, and topsoil shall be spread to a depth of approximately four inches over the entire area and the entire area seeded with 30 pounds (pure live seed) of common Bermuda per 1000 square feet and then watered as required until a lush hardy growth is established to the satisfaction of the Contracting Officer. Restoration to original contours is required unless otherwise directed by the Contracting Officer.

5.1.2.7 At the end of the project, and prior to final acceptance, the Contractor shall submit a solid waste diversion report by completing the Construction Waste Management form identifying the materials and weights either recycled or diverted from solid waste disposal to other re-use as well as weights of waste disposed in a landfill.

5.13 GREEN PROCUREMENT: Green Purchasing is a mandatory component of the Air Force pollution prevention program. The Under Secretary of Defense issued a policy memorandum "Establishment of the DoD Green Purchasing Program (GPP)" which states: "The DoD goal is to achieve 100% compliance with mandatory Federal GPP programs is all acquisition transactions." This document contains guidelines for implementing the RCRA, EO, DOD, and Air Force requirements.

5.14 ENVIRONMENTAL MANAGEMENT SYSTEM: Contractor's on site supervisory personnel shall complete EMS Awareness Training. The Base Civil Engineer Environmental Coordinator shall be contacted at (325) 654-5946 for information to complete the awareness training within 60 days of contract award or a new contract employee supervisor begins work. The training shall be accomplished utilizing The Environmental Awareness Course Hub (TEACH) at <https://usaf.learningbuilder.com>. The Contractor shall be responsible for providing EMS Awareness Training records, for each employee, to the Contracting Officer

**PART 6.0 - SITE MAINTENANCE AND CLEANUP:**

6.1 SITE MAINTENANCE: The Contractor shall protect adjacent property, buildings and their contents from dust, dirt or other materials. Work areas shall be maintained in a neat, clean, safe condition and shall, at a minimum, be cleaned at the end of each shift. All streets and roadways in/or adjacent to the site shall remain free of project generated trash and debris at all times.

**PART 7.0 - ENERGY CONSERVATION:**

7.1 UTILITIES CONSERVATION: The Contractor shall instruct employees in utilities conservation practices. The Contractor shall be responsible for operating under conditions that preclude the waste of utilities, which shall include: Lights shall be used only in areas where and when work is actually being performed. The Contractor shall not adjust mechanical equipment controls for heating, ventilation and air conditioning systems. Water faucets or valves shall be turned off after the required usage has been

RFP 21-005: GAFB DEAAG CONSTRUCTION - CANOPY STRUCTURES & PT FIELD

ARMY TRAINING FIELD

accomplished. The Contractor shall use good judgment in the conservation of Government utilities. Prevailing energy conservation practices shall be adhered to and enforced by the Contractor.

#### PART 8.0 – RESPONSIBILITY:

8.1 The above 1 through 7 summaries shall not in any way limit the responsibility of the Contractor to perform all work and furnish all plant, labor, and materials required by this Statement of Work.

#### PART 9.0 – STORAGE AND PARKING:

9.1 CONTRACTOR STORAGE: The Contracting Officer's representative shall designate Contractor storage and parking area. All project storage areas shall be kept free of debris, leaks, stains, or splashes and kept in a neat, clean, and safe condition. Any contamination of the storage area by a hazardous substance shall be immediately remediated by the Contractor, in accordance with PART 5.0 above at no additional expense to the Government. All hazardous materials shall be secured when not in use.

#### PART 10.0 - COMPLETION OF WORK:

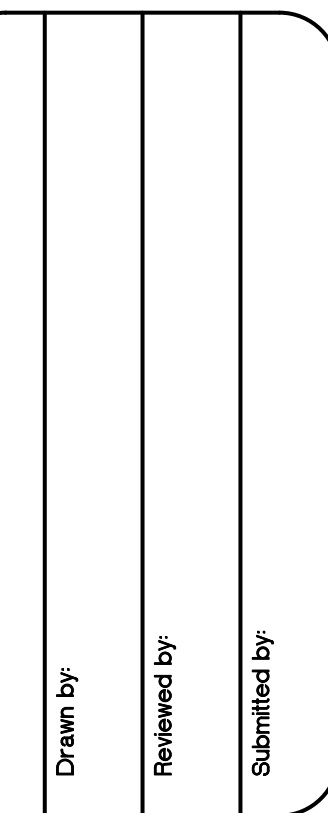
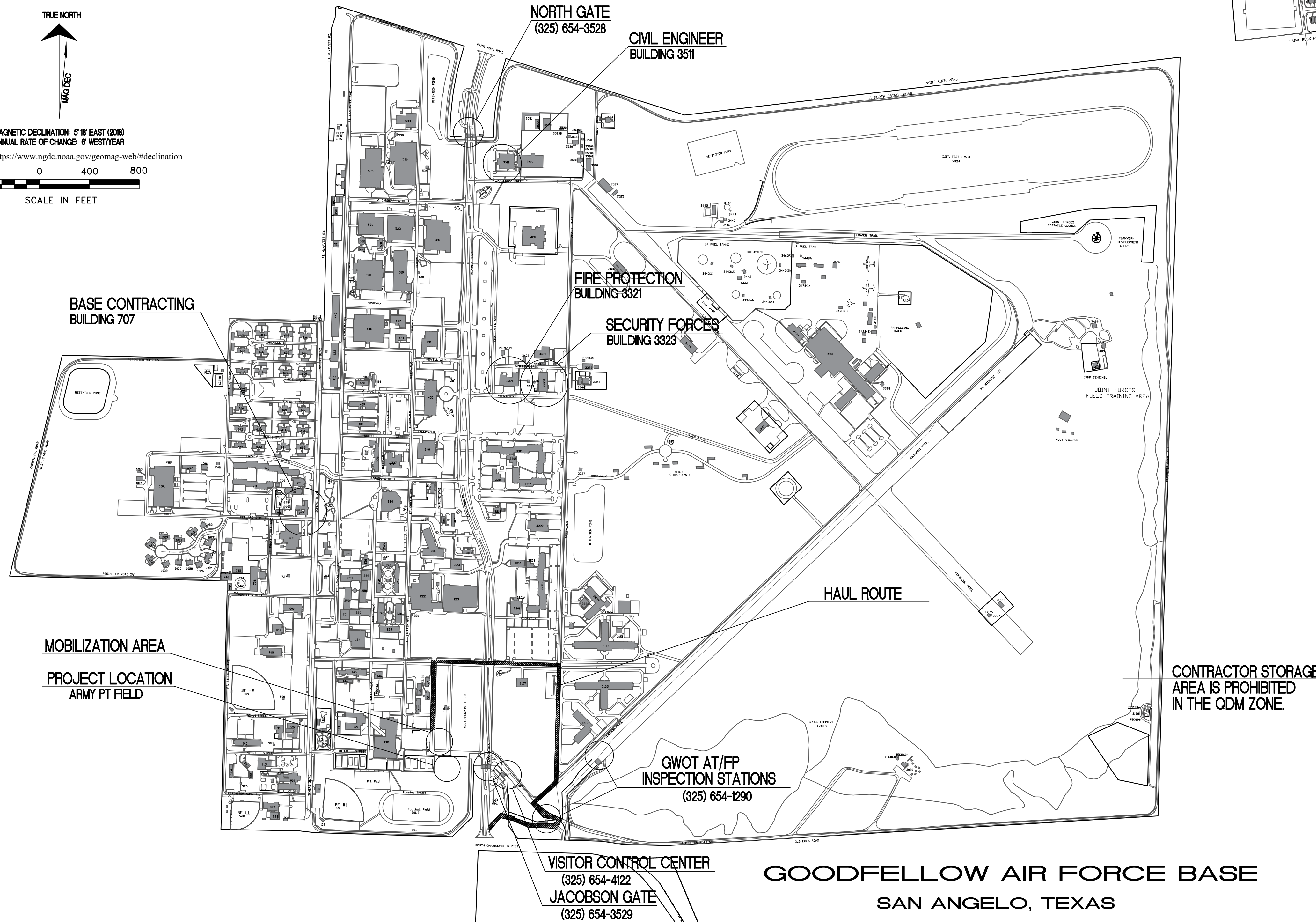
10.1 OPERATIONAL SYSTEMS: The Contractor shall insure that work for this project is performed in accordance with the criteria herein and that all equipment and systems shall be fully operational at the completion of work for this project.

**---END OF STATEMENT OF WORK---**



# CONSTRUCT ARMY PHYSICAL TRAINING (PT) FIELD

1093157



1. PROSPECTIVE OFFERERS: MAY ONLY CONTACT THE BASE CONTRACTING OFFICE 17 CONS/LGCA, 210 SCHERTZ BLVD, GOODFELLOW AIR FORCE BASE, TEXAS 76908-4122, 325-654-5174 FOR ANY AND ALL INFORMATION WITH REGARDS TO THIS SOLICITATION.
2. ALL WORK IS NEW UNLESS OTHERWISE INDICATED TO BE "EXISTING" OR "REUSED" OR "RELOCATED." THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
3. THE CONTRACTOR SHALL INITIATE AND PROCESS FOR APPROVAL AF FORM #103 "WORK CLEARANCE REQUEST" FOR THE CONTRACTING OFFICER PRIOR TO PERFORMANCE OF ON-SITE WORK.
4. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO EXCAVATION OR TRENCHING. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE SERVICE LINES AS REQUIRED FOR CONSTRUCTION FOR THIS PROJECT.
5. THE CONTRACTOR SHALL HAND DIG WITHIN (2) FEET EITHER SIDE OF UTILITY CROSSING UNTIL THE UTILITY IS PHYSICALLY EXPOSED, PRIOR TO PERFORMING MECHANICAL TRENCHING OR EXCAVATING. PROVIDE NEW TOPSOIL AND HYDROMULCHING IN ALL AREAS WHERE DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES.
6. PROSPECTIVE OFFERERS ARE HIGHLY ENCOURAGED TO ATTEND THE SCHEDULED PRE-PROPOSAL SITE VISIT TO THOROUGHLY FAMILIARIZE THEMSELVES WITH ANY AND ALL EXISTING SITE AND PROJECT LOCATION CONDITIONS WHICH MAY AFFECT THE WORK UNDER THIS CONTRACT. THE GOVERNMENT SHALL NOT BE RESPONSIBLE FOR CONTRACTOR ERRORS OR OMISSIONS WHICH COULD BE MADE KNOWN BY ATTENDING A SCHEDULED SITE VISIT.
7. THE CONTRACTOR SHALL COORDINATE ALL COMMUNICATIONS WORK WITH THE ENGINEERING SECTION MANAGER AT FRONTIER COMMUNICATIONS AT 1-800-921-8102; WITH THE INSTALLATION OFFICE, SUDDEN-LINK CABLE AT 1-877-794-2724 AND THE GOODFELLOW AFB COMMUNICATIONS SQUADRON AT 325-654-3010.

1. DO NOT SCALE DRAWINGS. VERIFY ALL ELEVATIONS AND DIMENSIONS ON SITE, AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER.
2. SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH DRAWINGS FOR PURPOSES OF BIDDING, SCHEDULING, AND CONSTRUCTION.
3. NO OPEN CUTTING OF ANY ROADWAY, PARKING AREA, OR SIDEWALK SHALL BE MADE UNLESS DIRECT WRITTEN APPROVAL FROM CONTRACTING IS PROVIDED.
4. REFERENCE THE US ARMY CORPS OF ENGINEERS HEALTH AND SAFETY MANUAL, EM385-1-1, LATEST EDITION.
5. CONTRACTOR SHALL DISPOSE OF ALL CONSTRUCTION MATERIALS OUTSIDE OF THE INSTALLATION.
6. CONTRACTOR TO COORDINATE WITH CONTRACTING OFFICER TO LOCATE ALL UNDERGROUND UTILITIES AND BURIED ITEMS. FOR LOCATIONS AND DEPTHS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK RELATED TO CONSTRUCTION, ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, ETC. REQUIRED TO SAFELY PERFORM THE WORK.
8. HAUL ROUTE FOR CONSTRUCTION TRAFFIC FROM ENTRANCE AT SOUTH CONSTRUCTION GATE ON SOUTH CHADBOURNE STREET, NORTH ON APACHE TRAIL, THEN WEST ON VALIANT STREET AND FINALLY SOUTH ON FLIGHTLINE AVE. CONTRACTOR PROVIDED: DOUBLE GATE WITH 6 FOOT HIGH STAND-UP SILT FENCE WITH SAND BAG SUPPORTS FOR MOBILIZATION AREA.
9. RESTORE SITE AFTER CONSTRUCTION COMPLETION TO INCLUDE ESTABLISHED TURF.

CONSTRUCTION ARMY PHYSICAL TRAINING  
(PT) FIELD  
PROJECT NUMBER: 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

093157

OVER SHEET

-ii- 2020

SHEET

OF

01	CS-1	07
----	------	----



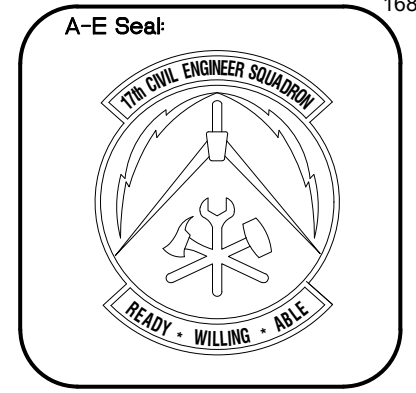
## TYPICAL ABBREVIATIONS [WHERE APPLICABLE]

ACCORD.	ACCORDANCE	DEMO	DEMOLITION
ACOUS. INSUL.	ACOUSTIC INSULATION	DET	DETAIL
ADDTN.	ADDITION	DIM	DIMENSION
ADJ.	ADJUSTABLE	DIST	DISTANCE
AFF	ABOVE FINISH FLOOR	DWG	DRAWING
ALUM.	ALUMINUM	EA	EACH
ATTEN.	ATTENUATING	ELEC	ELECTRIC(AL)
BITUM	BITUMINOUS	E.W.C.	ELECTRIC WATER COOLER
BLK	BLOCK	EXIST.	EXISTING
BLKG	BLOCKING	EXP. JT.	EXPANSION JOINT
BM	BENCH MARK	EQ	EQUAL
BOT	BOTTOM	E.W.	EACH WAY
CAB	CABINET	EXT.	EXTERIOR
CEM. BD.	CEMENTITIOUS BOARD	EXT. CAB.	EXTINGUISHER CABINET
CER TILE	CERAMIC TILE	F.D.	FLOOR DRAIN
CLG	CEILING	FEC	FIRE EXTINGUISHER CABINET
CONC.	CONCRETE	FIN	FINISH
CMU	CONC. MASONRY UNIT	FIN FLR	FINISH FLOOR
COL.	COLUMN	FLOUR.	FLOURESCENT
CONF.	CONFERENCE	FLR.	FLOOR
CONT.	CONTINUOUS	FLR. E.J.	FLOOR EXPANSION JOINT
COORD	COORDINATE	FURR'G	FURRING
CORR	CORRIDOR	GA.	GAUGE

GALV	GALVANIZED	PLY*WD	PLYWOOD	U.S.G.	UNITED STATES GYPSUM
GFE	GOVERNMENT FURNISH	PLBG.	PLUMBING	V.C.T.	VINYL COMPOSITION TILE
	EQUIPMENT	PROJ. MNT.	PROJECTOR MOUNT	VERT.	VERTICAL
GYP BD.	GYPSUM BOARD	PROT.	PROTECTION	V.W.C.	VINYL WALL COVERING
H.C.	HANDICAPPED	PSI	POUNDS PER	WD.	WOOD
HDWD.	HARDWOOD		SQUARE INCH	WDW.	WINDOW
H.M.	HOLLOW METAL	R.A.F.	RAISED ACCESS FLOOR	W/	WITH
HORIZ.	HORIZONTAL	REF.	REFERENCE	W/MFR'S	WITH MANUFACTURER'S
INSUL	INSULATION	RESIL.	RESILIENT	W.W.F.	WELDED WIRE FABRIC
LAV	LAVATORY	RM.	ROOM	ø	DIAMETER
MAINT	MAINTENANCE	SCHED.	SCHEDULE		
MAX.	MAXIMUM	SCTN.	SECTION		
MECH.	MECHANICAL	SCW	SOLID CORE WOOD		
MFRD.	MANUFACTURED	SPEC.	SPECIFICATION		
MIN.	MINIMUM	S.S.	STAINLESS STEEL		
MISC.	MISCELLANEOUS	STL.	STEEL		
MPE	MECHANICAL—PLUMBING—	STRUCT.	STRUCTURE		
	ELECTRICAL	SUSP. GRID			
MTD.	MOUNTED	CLG. SYS.	SUSPENDED GRID		
MTL.	METAL		CEILING SYSTEM		
O.C.	ON CENTER	THK.	THICK		
O.C.E.W.	ON CENTER EACH WAY	TYP.	TYPICAL		
OPNG.	OPENING	TYP. MRKR./	TYPICAL MARKER/TACK		
ORIG. BLDG.	ORIGINAL BUILDING	TACK BD.	BOARD		
P	PLATE	UNC.	UNCASED		

INDEX OF DRAWINGS:

1. CS-1 COVER SHEET
2. CS-2 INDEX OF DRAWINGS, NOTES, ABBREVIATIONS
3. CS-3 PROJECT NOTES
4. SP-1 SITE PLAN
5. SP-2 MISCELLANEOUS DETAILS
6. PE-1 UTILITY SITE PLAN
7. PE-2 ELECTRICAL PLAN

[illegible]

Designed by:
Drawn by:
Reviewed by:
Submitted by:

PROJECT TITLE  
CONSTRUCT ARMY PHYSICAL TRAINING  
(PT) FIELD  
PROJECT NUMBER: 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

Project Number:	1093157
SHEET TITLE	ABBREVIATIONS, INDEX OF DRAWINGS AND LOCALIZED SITE PLAN
Date:	April, 2020

SEQ.	SHEET	OF
02	CS-2	07

### PRIVATIZED ELECTRICAL UTILITY SYSTEMS:

AEP TEXAS NORTH COMPANY IS THE UTILITY OWNER AND SOLE PROVIDER OF THE ELECTRICAL DISTRIBUTION UTILITY SYSTEM AT GOODFELLOW AIR FORCE BASE, TEXAS.

NEWLY PROVIDED SYSTEM INFRASTRUCTURE AND/OR MODIFICATIONS OF OR CONNECTIONS TO THE EXISTING SYSTEM INFRASTRUCTURE IDENTIFIED IN THE SPECIFICATIONS AND/OR DRAWINGS MUST BE COORDINATED WITH THE UTILITY OWNER PRIOR TO THE CONTRACT START DATE. TO CONNECT FACILITIES, THE CONSTRUCTION CONTRACTOR SHALL REQUEST THAT THE UTILITY OWNER PROVIDE THE REQUIRED CONNECTING FACILITIES, UP TO A POINT OF DEMARCATION WHICH INCLUDES ALL TERMINATIONS AT THE TRANSFORMER.

ALL WORK ON THE SYSTEM OR FACILITIES EXPECTED TO CONNECT TO THE SYSTEM SHALL COMPLY WITH THE UTILITY OWNER'S SPECIFICATIONS AND CONSTRUCTION STANDARDS. IN NO EVENT SHALL THE CONSTRUCTION CONTRACTOR CONNECT TO, OR OTHERWISE TOUCH THE UTILITY OWNER'S INFRASTRUCTURE WITHOUT THE UTILITY OWNER'S EXPRESS WRITTEN PERMISSION.

THE UTILITY OWNER: CONTACT VIA:  
AEP TEXAS NORTH COMPANY  
930 West 19th Street  
San Angelo, Texas 76903  
PHONE: 325-657-2800

ARCHITECT / ENGINEER RESPONSIBILITIES:

1. SITE PLAN WITH ADJACENT STREETS OR LANDMARKS IDENTIFIED.
2. BUILDING PLAN SHEETS WITH THE FOLLOWING INFORMATION:
  - A. LOCATION OF SERVICE ENTRANCE
  - B. REQUESTED TRANSFORMER LOCATION, IF A PREFERENCE IS KNOWN.
  - C. SQUARE FOOTAGE OF BUILDING SPACE WITH THE TYPE OF LOAD TO BE SERVED.
  - D. ELECTRICAL PANEL SCHEDULE
  - E. NUMBER AND SIZE OF SECONDARY CONDUCTORS TO BE TERMINATED AT THE TRANSFORMER
  - F. PROPOSED LOCATION OF OTHER UTILITY ROUTES AND ENTRANCES.
3. LOAD DEMAND INFORMATION FROM EXISTING SIMILAR BUILDINGS.
4. SCHEDULE OF WORK.

CONTRACTOR / BUILDER RESPONSIBILITIES:

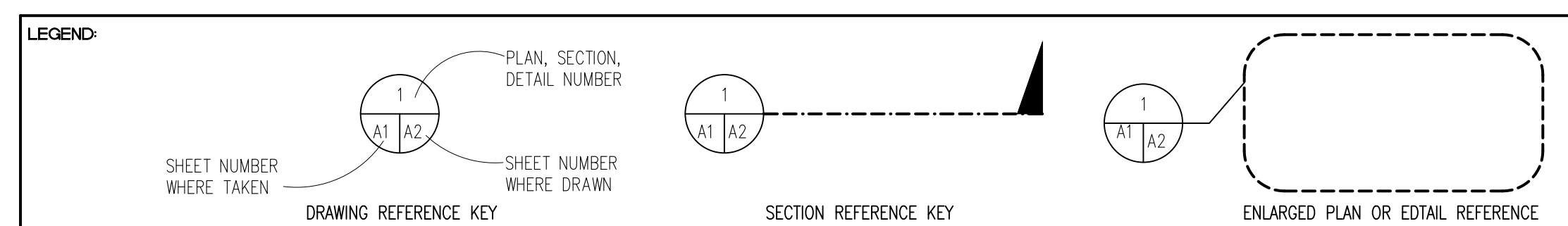
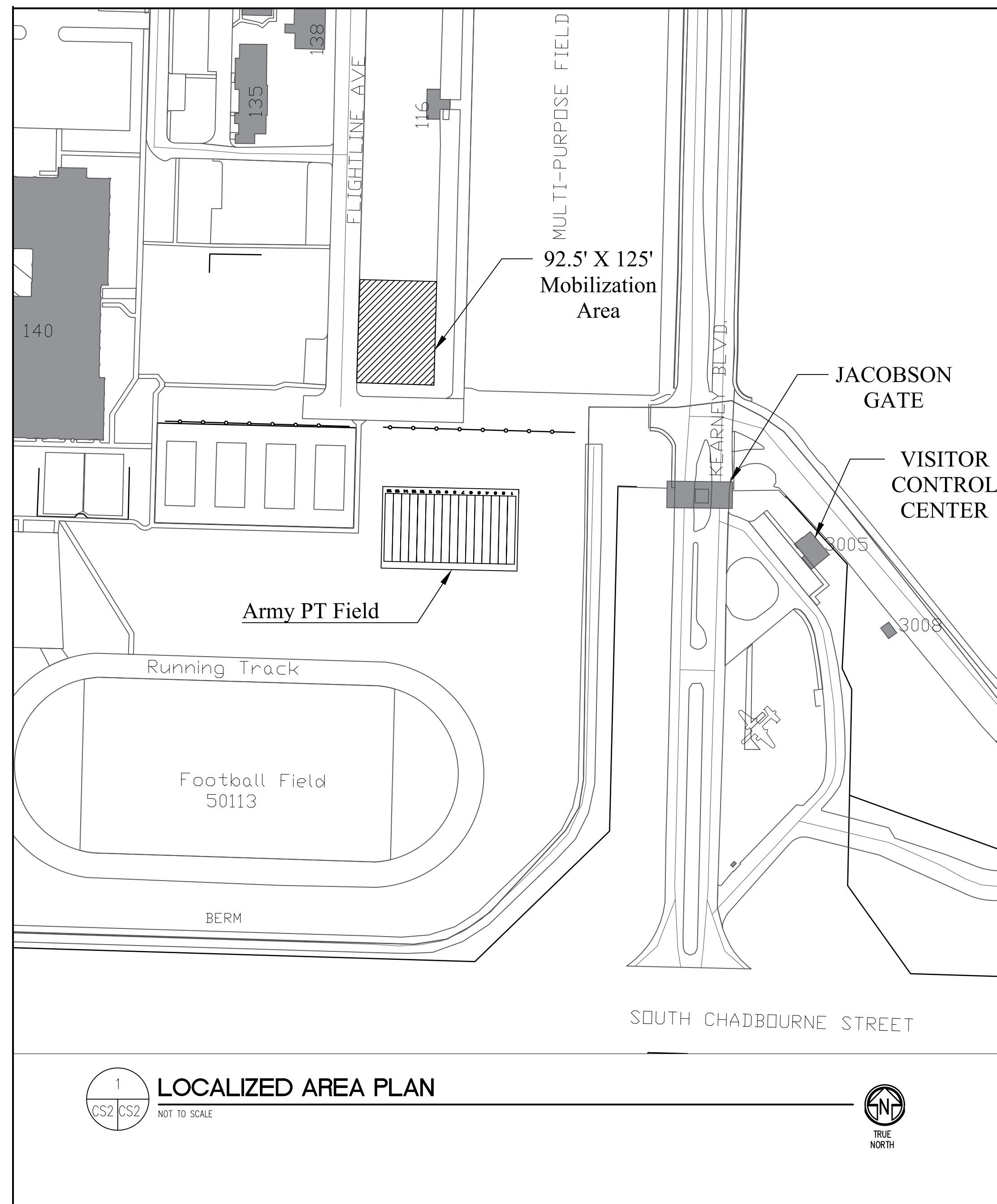
1. CONTACT NAMES AND NUMBERS UPON ARRIVAL AT THE SITE.
2. LOCATION OF TRANSFORMER PAD.
3. INSTALL SECONDARY CONDUITS INTO THE APPROPRIATE WELL LOCATION BEFORE PAD INSTALLATION. THIS INCLUDES ANY REQUIRED METERING CABLE CONDUITS.
4. PROVIDE FINAL GRADE IN TRANSFORMER PAD AREA PRIOR TO PAD CONSTRUCTION.
5. INSTALLATION OF ANY REQUIRED INSTRUMENT RATED METERING EQUIPMENT.
6. PROVIDE SECONDARY CABLE TERMINALS.
7. PRIMARY CONDUIT DITCH COMPACTION IF REQUIRED.
8. ASPHALT AND/OR CONCRETE CUT AND REPAIR IF REQUIRED.
9. LOCATION OF OTHER UTILITY LINES INSTALLED DURING THIS CONSTRUCTION.
10. TEMPORARY POWER POLE (SEE ATTACHED SKETCHES). LOCATION TO BE APPROVED BY AEP TEXAS. NOTE: ANY LINE EXTENSION REQUIRED FOR THE PURPOSE OF TEMPORARY SERVICE WILL REQUIRE A CIAC TO COVER THE COST OF INSTALLATION AND REMOVAL OF TEMPORARY FACILITIES AND ANY MATERIAL WHICH CANNOT BE REUSED.

AEP TEXAS RESPONSIBILITIES:

1. SIZING AND INSTALLATION OF ALL PRIMARY CONDUCTORS INCLUDING DITCH AND CONDUIT.
2. SIZING AND INSTALLATION OF DISTRIBUTION TRANSFORMERS.
3. CONSTRUCTION OF TRANSFORMER PAD. SEE ATTACHED SKETCH
4. INSTALLATION OF SECONDARY CABLE TERMINALS.

CONSTRUCTION NOTES:

1. THE EDGE OF THE TRANSFORMER PAD SHALL NOT BE CLOSER THAN TWO FEET FROM A WALL, OR FIVE FEET FROM A DOOR OR WINDOW, OR TWENTY FEET FROM A STAIRWELL OR FIRE ESCAPE.
2. TRANSFORMERS SHALL NOT BE COMPLETELY ENCLOSED BY WALLS, FENCES, OR LANDSCAPING WITHOUT VENTILATION WHICH IS APPROVED BY AEP TEXAS. THE ENTIRE WIDTH OF THE FRONT OF THE TRANSFORMER AND SECONDARY CABINET SHALL BE ACCESSIBLE. IF A FENCE IS INSTALLED, IT WILL HAVE SUFFICIENT GATES NECESSARY TO PROVIDE THIS ACCESS.
3. TRANSFORMERS WILL BE LOCATED IN THE AREAS WITH ALL WEATHER ACCESS BY SERVICE TRUCKS. IN ADDITION, THERE WILL BE NO STRUCTURES CONSTRUCTED ABOVE TRANSFORMERS WHICH WOULD INHIBIT CRANE OPERATIONS.
4. NO OTHER UTILITY LINES WILL BE INSTALLED WITHIN TWO FEET OF THE TRANSFORMER PAD.
5. NO CUSTOMER EQUIPMENT, EXCEPT INSTRUMENT RATED METERING EQUIPMENT WHICH IS PLACED ON THE SECONDARY BUSHINGS, SHALL BE ATTACHED TO AEP TEXAS TRANSFORMERS; NOR WILL THERE BE ANY HOLES DRILLED INTO THE TRANSFORMER CABINET FOR CONDUITS, CONDUCTORS OR METERS.
6. THE NUMBER AND SIZE OF THE SECONDARY CONDUCTORS WHICH ARE ALLOWED TO BE ATTACHED TO THE TRANSFORMER SECONDARY BUSHINGS WILL BE CONTROLLED BY AEP TEXAS. IF THE DESIGN REQUIRES MORE OR LARGER CONDUCTORS THAN ALLOWED FOR A PARTICULAR TRANSFORMER SIZE, AEP TEXAS WILL INSTALL A SECONDARY CABINET WITH BUS BARS (SEE ATTACHED SKETCH) ADJACENT TO THE TRANSFORMER. AEP TEXAS WILL SUPPLY AND INSTALL THE SECONDARY CONDUCTORS FROM THE TRANSFORMER TO THE SECONDARY CABINET. THE POINT OF INTERCONNECTION WILL BE THE BUS BARS WITHIN THE SECONDARY CABINET. THIS CABINET WILL REQUIRE A LARGER TRANSFORMER PAD AS SHOWN ON THE ATTACHED SKETCH.
7. TRANSFORMERS LARGER THAN 1000 KVA WILL REQUIRE A LARGER PAD. THIS PAD IS SHOWN ON THE SKETCH LABELED 1500 AND 2500 KVA.
8. TEMPORARY CONSTRUCTION POWER WILL BE SUPPLIED TO CUSTOMER SUPPLIED POWER POLES LOCATED WITHIN FIVE FEET OF AN EXISTING PAD MOUNTED TRANSFORMER OR WITHIN FIFTY FEET OF A PRIMARY POWER POLE (SEE ATTACHED SKETCHES).



### A. GENERAL NOTES

1. CONSTRUCTION ACCESS TO THE SITE SHALL BE THROUGH THE EXISTING GATE LOCATED ON SOUTH CHADBOURNE STREET. ALL CONSTRUCTION TRAFFIC ENTERING THE BASE IS REQUIRED TO PASS THROUGH THE COMMERCIAL VEHICLE SEARCH AREA LOCATED TO THE EAST OF KEARNEY BOULEVARD. HOURS OF OPERATION ARE FROM 6:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY, PHONE 325-654-1290.
2. CONTRACTORS SHALL KEEP ALL PUBLIC ROADS AND STREETS CLEAN OF CONSTRUCTION DEBRIS, MUD, ETC. AT ALL TIMES. CONTRACTOR SHALL PROVIDE EQUIPMENT AND PERSONNEL TO CLEAN ANY STREETS AS REQUESTED BY 170CS. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS TO STREETS, PARKING AREAS AND BASE OR GOVERNMENT PROPERTY DAMAGED FROM THEIR CONSTRUCTION ACTIVITIES.
3. CONTRACTORS SHALL MAINTAIN A CONSTRUCTION SITE NEAT AND CLEAN OF DEBRIS AS DIRECTED BY CONTRACTING OFFICER. CONTRACTOR WASTE DUMPSTERS SHALL BE EMPTIED ON A REGULAR BASIS.

### B. STAGING NOTES

1. CONTRACTOR SHALL INSTALL AND MAINTAIN A TEMPORARY CONSTRUCTION CHAIN LINK FENCE, 6 FEET HIGH, AROUND THE LIMITS OF WORK NOT INCLUDING THE CONSTRUCTION ACCESS ROAD. COORDINATE CHAIN AND PADLOCKS ON GATES WITH GOODFELLOW FIRE DEPARTMENT. EACH GATE SHALL BE NUMBERED FOR EMERGENCY ACCESS, SHALL HAVE ENTRY/EGRESS SIGNAGE AND AREA LIGHTING. CONTRACTORS SHALL MAINTAIN FIRE ACCESS THROUGH EACH INDIVIDUAL CONSTRUCTION SITE AT ALL TIMES.
2. TRUCK WASHOUT AREA SHALL BE CONSTRUCTED, MAINTAINED AND CLEANED IN ACCORDANCE WITH TCEQ REGULATIONS. PROVIDE DETAILS AND MAINTENANCE PLAN AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN. STORMWATER PERMITS ARE REQUIRED PRIOR TO THE START OF CONSTRUCTION.
3. ALL CONTRACTORS SHALL STOCKPILE REQUIRED MATERIALS AND EQUIPMENT WITHIN LIMITS OF RESPECTIVE PROJECT AREAS OR STAGING AREA AS INDICATED ON THE DRAWINGS.
4. CONTRACTOR SHALL CONNECT TO EXISTING OR NEW FIRE HYDRANTS FOR TEMPORARY CONSTRUCTION WATER. INSTALL QUICK DISCONNECT, BACK FLOW PREVENTER AND SHUT-OFF VALVE ON 2 1/2" HOSE CONNECTION ONLY. PRIOR TO MAKING ANY CONNECTIONS TO BASE WATER SYSTEMS, THE CONTRACTOR MUST NOTIFY AND COORDINATE WITH 17CES. A FIRE PLUG USAGE PERMIT IS REQUIRED AND USAGE SHALL BE METERED AT ALL TIMES.
5. ALL TEMPORARY ELECTRIC POWER FACILITIES SHALL MEET OR EXCEED NESC AND NEC REQUIREMENTS AS APPLICABLE FOR PRIMARY AND SECONDARY FACILITIES.

### C. ACCESS AND VEHICLE PARKING

1. ACCESS TO THE PROJECT FOR ALL CONSTRUCTION PERSONNEL, VEHICLES AND EQUIPMENT IS ILLUSTRATED ON THE STAGING/LAYDOWN AND ACCESS PLAN. ACCESS ROUTES MAY BE SUBJECT TO CHANGE BASED ON OPERATIONAL REQUIREMENTS. POTENTIAL SCHEDULE IMPACTS SHALL BE COORDINATED WITH 17CES.
2. LOCATION OF ACCESS/ HAUL ROADS ARE AS INDICATED ON THE STAGING/LAYDOWN AND ACCESS PLAN.
3. ALL HAUL ROADS SHALL BE MAINTAINED SUCH THAT UNOBSTRUCTED ACCESS WILL BE PROVIDED AT ALL TIMES FROM THE ROAD TO THE STAGING AREA AND FROM THE STAGING AREA TO THE WORK SITE AND FACILITATE GOVERNMENT ACCESS TO THE BASE AT ALL TIMES. THE MAINTENANCE OF HAUL ROADS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT. THE HAUL ROAD LOCATIONS SHALL BE AS INDICATED ON THE STAGING/LAYDOWN AND ACCESS PLAN OR BY 17CES.
4. CONTRACTOR SHALL COORDINATE ACTIVITIES THROUGHOUT THE PROJECT IN A MANNER THAT ALLOWS EMERGENCY ACCESS TO ALL EXISTING ROADWAYS AT ALL TIMES WITHOUT DELAYS TO EMERGENCY VEHICLES RESPONSE TIME.
5. ALL CONTRACTOR VEHICLES AND PERSONNEL MAY BE SEARCHED BY SECURITY FORCES WHEN ENTERING THE BASE AND MAY EXPERIENCE DELAYS. ALL PERSONNEL ENTERING GOODFELLOW AFB MUST HAVE A VALID PHOTO ID PER BASE SECURITY REQUIREMENTS. ALL VEHICLES ENTERING THE BASE MUST HAVE CURRENT/ VALID REGISTRATION, CURRENT/ VALID INSURANCE AND CURRENT/ VALID DRIVERS LICENSE FOR THE OPERATOR. ALL DRIVERS MUST COMPLY WITH ALL GOODFELLOW AFB DRIVING REQUIREMENTS (SPEED LIMITS, SEATBELTS, ETC.)
6. WHEN NOT ENGAGED IN CONSTRUCTION ACTIVITIES, THE CONTRACTOR'S CONSTRUCTION EQUIPMENT AND VEHICLES SHALL BE PARKED WITHIN THE WORK AREA OR STAGING AREA.

#### D. COORDINATION AND COMMUNICATION DURING CONSTRUCTION

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CORDON OFF THE WORK AREAS AND STREET CROSSINGS BY USING APPROVED BARRICADES.

### E. TRAFFIC CONTROL

1. ONLY RUBBER-TIRED VEHICLES SHALL BE ALLOWED ON EXISTING PAVEMENT THAT IS TO REMAIN.
2. ANY DAMAGE TO ROADS AND PAVEMENT DUE TO CONSTRUCTION EQUIPMENT, CONSTRUCTION TRAFFIC OR CONSTRUCTION ACTIVITY SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT HIS/ HER OWN EXPENSE.
3. CONTRACTOR SHALL BORE UNDER KEARNEY BOULEVARD AS NO OPEN CUTTING OF THIS STREET IS ALLOWED.

#### F. EQUIPMENT AND STOCKPILE HEIGHT

1. STOCKPILE ALL CONSTRUCTION MATERIALS WITHIN STAGING AREA. MAXIMUM HEIGHT 15.00' WITH 5:1 SIDE SLOPES. PROVIDE EROSION CONTROL PROTECTION AROUND THE STOCKPILE LIMITS. ANY MATERIALS THAT ARE TO BE STOCKPILED FOR USE FOR OTHER PROJECTS ON THE BASE SHALL BE COORDINATED WITH 17CES. ALL MATERIAL NOT REQUIRED SHALL BE HAULED OFF GOVERNMENT PROPERTY.

## G. EXCAVATION AND TRENCHES

1. OPEN TRENCHES AND EXCAVATIONS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE AND WHITE TYPE III BARRICADES AND WITH FLASHING TYPE A-LOW INTENSITY WARNING LIGHTS FROM DUSK TILL DAWN.

#### H. OTHER SAFETY REQUIREMENTS

1. CONTRACTOR SHALL MAINTAIN SAFETY PRACTICES THAT CONFORM TO OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS.
2. CONTRACTOR SHALL MAINTAIN AT ALL TIMES ONE FIRE LANE FREE FROM OBSTRUCTION AND MAINTAIN ACCESS TO THE SITE AND ALL SURROUNDING ROADS AND STREETS.

## I. CONTRACTOR SAFETY PLAN SUBMITTALS

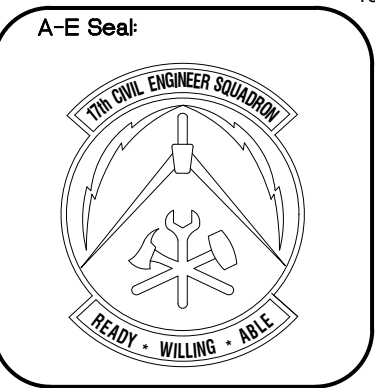
1. CONTRACTOR SHALL FURNISH A CONSTRUCTION SAFETY PLAN IN ACCORDANCE WITH THE SPECIFICATIONS WITH HIS/HER PROJECT SCHEDULE. THE SAFETY PLAN SHALL IDENTIFY THE FOLLOWING ITEMS:
- A. PROPOSED ACCESS POINTS, STAGING AREA AND HAUL ROUTES.
  - B. TEMPORARY MARKINGS TO BE USED, IF ANY.
  - C. LOCATIONS AND TYPE OF BARRICADES OR OTHER TRAFFIC CONTROL DEVICES.
  - D. METHODS BY WHICH THE CONTRACTOR WILL COMMUNICATE WITH 17CES.

#### J. MAINTENANCE OF STORAGE AREA

1. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE CONSTRUCTION SITE, CONSTRUCTION TRAILER(S)/BUILDING(S), AND STORAGE AREA(S) IN A CLEAN, NEAT, WORKMAN LIKE CONDITION, FREE FROM ACCUMULATION OF WASTE, RUBBISH, WEEDS, OVERGROWN GRASS, OR CONSTRUCTION DEBRIS, TO THE SATISFACTION OF THE CONTRACTING OFFICER. ALL LOOSE OR LIGHT WEIGHT MATERIALS SHALL BE SECURED TO PREVENT BLOWING OR SCATTERING. THE BURNING OF TRASH OR CONSTRUCTION DEBRIS IS STRICTLY PROHIBITED ON GOODFELLOW AFB. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS, TOOLS, EQUIPMENT, AND MATERIALS NOT THE PROPERTY OF THE GOVERNMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL LEAVE THE WORK SITE AND STORAGE AREA(S) IN A CLEAN, NEAT, AND WORKMANLIKE CONDITION SATISFACTORY TO THE CONTRACTING OFFICER. REFER TO SECTION 01 57 20.16 44 - ENVIRONMENTAL PROTECTION FOR GOODFELLOW AFB, PARAGRAPH 3.17, POST-CONSTRUCTION CLEANUP.
2. THE CONTRACTOR SHALL KEEP FENCING IN A STATE OF GOOD REPAIR AND PROPER ALIGNMENT. GRASSED OR UNPAVED AREAS, WHICH ARE NOT ESTABLISHED ROADWAYS, WILL BE COVERED WITH A LAYER OF GRAVEL AS NECESSARY TO PREVENT RUTTING AND THE TRACKING OF MUD ONTO PAVED OR ESTABLISHED ROADWAYS, SHOULD THE CONTRACTOR ELECT TO TRAVERSE THEM WITH CONSTRUCTION EQUIPMENT OR OTHER VEHICLES; GRAVEL GRADATION WILL BE AT THE CONTRACTOR'S DISCRETION. MOW AND MAINTAIN GRASS LOCATED WITHIN THE BOUNDARIES OF THE CONSTRUCTION SITE FOR THE DURATION OF THE PROJECT. GRASS AND VEGETATION ALONG FENCES, BUILDINGS, UNDER TRAILERS, AND IN AREAS NOT ACCESSIBLE TO MOWERS WILL BE EDGED OR TRIMMED NEATLY.
3. GRASS AND WEEDY VEGETATION WITHIN THE AREAS UTILIZED BY THE CONTRACTOR, INCLUDING WORK AREAS, ADMINISTRATIVE AREAS, AND STORAGE AREAS, SHALL BE KEPT MOWED TO CONTROL VEGETATIVE GROWTH. VEGETATION SHALL BE MOWED WHEN IT REACHES A HEIGHT OF 6 INCHES. MOWING SHALL BE TO A HEIGHT OF 3 INCHES. MOWING SHALL BE ACCOMPLISHED WITH A ROTARY MOWER THAT DROPS THE CLIPPINGS EVENLY DISTRIBUTED ON THE SOIL SURFACE. MOWING SHALL BE ACCOMPLISHED DURING PERIODS AND IN SUCH MANNER THAT THE SOIL AND GRASS WILL NOT BE DAMAGED. TOWED OR SELF-PROPELLED RIDING MOWERS SHALL NOT BE OPERATED WITHIN 3 FEET OF TREES OR SHRUBS. AREAS ADJACENT TO TREES AND SHRUBS SHALL BE MOWED WITH HAND-PROPELLED MOWERS.
4. EROSION CONTROL DEVICES SHALL BE USED FOR THE STAGING AREA AND ANY MATERIAL STOCK PILES WHEN NECESSARY TO CONTROL EROSION AND STORM WATER RUNOFF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
5. AREAS NOT MOWED: GOVERNMENT MAY IMMEDIATELY AFTER NOTICE TO THE CONTRACTOR AND AT THE DISCRETION OF THE CONTRACTING OFFICER MOW THE CONTRACTOR'S AREAS AT ANY TIME THE VEGETATION HEIGHT EXCEEDS 6 INCHES.

### K. WATERING

1. THE CONTRACTOR SHALL COMPLY WITH THE CURRENT CITY OF SAN ANGELO, TEXAS WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN FOR ALL ON BASE WATER USAGE.

[illegible]

Designed by:
Drawn by:
Reviewed by:
Submitted by:

PROJECT TITLE  
CONSTRUCT ARMY PHYSICAL TRAINING  
(PT) FIELD  
PROJECT NUMBER: 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

Project Number:	1093157
SHEET TITLE	PROJECT NOTES
Date:	April, 2020

SEQ.	SHEET	OF
03	CS-3	07



PLAN NOTES:

- 1

CONTRACTORS SHALL MAINTAIN A CONSTRUCTION SITE NEAT AND CLEAN OF DEBRIS AS DIRECTED BY CONTRACTING OFFICER. CONTRACTORS WASTE DUMPSTERS SHALL BE EMPTIED ON A REGULAR BASIS. ROADWAYS SHOULD BE CLEAR OF DIRT AND DEBRIS. CONTRACTOR WILL WATER DOWN AREA FOR DUST CONTROL.
- 2

CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCING AROUND THE LIMITS OF CONSTRUCTION/SITE TEMPORARY CONSTRUCTION FENCING. SILT FENCING WILL ALSO BE PROVIDED AROUND TWO STORM DRAINAGE SURFACE INLETS. AT THE POST CONSTRUCTION PHASE THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL MATERIALS RELATED TO THE SILT FENCING OF THE PROJECT, TO INCLUDE ACCUMULATED DEBRIS. CONTRACTOR IS RESPONSIBLE FOR BRINGING THE AREAS AROUND ALL SILT FENCING BACK TO THEIR ORIGINAL CONDITIONS PRIOR TO THE INSTALLATION OF SAID FENCING AND PROJECT CONSTRUCTION. CONTRACTOR WILL MAINTAIN RECORDS OF THE ORIGINAL CONDITION OF THE SITE. SUCH RECORDS WILL BE IN THE FORM OF COLOR PHOTOGRAPHS WHICH WILL BE KEPT ON FILE AS WELL AS TRANSMITTED TO THE GOVERNMENT FOR SAFE KEEPING.
- 3

CONTRACTOR SHALL INSTALL AND MAINTAIN A TEMPORARY CONSTRUCTION CHAIN LINK FENCE, 6 FEET HIGH, AROUND THE LIMITS OF WORK NOT INCLUDING THE CONSTRUCTION ACCESS ROAD. COORDINATE CHAIN AND PADLOCKS ON GATES WITH GOODFELLOW FIRE DEPARTMENT. EACH GATE SHALL BE NUMBERED FOR EMERGENCY ACCESS. SHALL HAVE ENTRY/EGRESS SIGNAGE AND AREA LIGHTING. CONTRACTORS SHALL MAINTAIN FIRE ACCESS THROUGH EACH INDIVIDUAL CONSTRUCTION SITE AT ALL TIMES.
- 4

TRUCK WASHOUT AREA SHALL BE CONSTRUCTED, MAINTAINED AND CLEANED IN ACCORDANCE WITH TCEQ REGULATIONS. PROVIDE DETAILS AND MAINTENANCE PLAN AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN. STORMWATER PERMITS ARE REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- 5

ALL CONTRACTORS SHALL STOCKPILE REQUIRED MATERIALS AND EQUIPMENT WITHIN LIMITS OF RESPECTIVE PROJECT AREAS OR STAGING AREA AS INDICATED ON THE DRAWINGS.
- 6

CONTRACTOR SHALL RELOCATE ALL STAGING AND STORAGE THAT SHALL NOT CROSS SOUTH SIDEWALK ADJACENT TO PARKING LOT, AND LOCATE SOUTH CONTRACTING FENCE ALONG(INSIDE) SIDEWALK. SIDEWALKS TO REMAIN OPEN.
- 7

ALL HAUL ROADS SHALL BE MAINTAINED SUCH THAT UNOBSTRUCTED ACCESS WILL BE PROVIDED AT ALL TIMES FROM THE ROAD TO THE STAGING AREA AND FROM THE STAGING AREA TO THE WORK SITE AND FACILITATE GOVERNMENT ACCESS TO THE BASE AT ALL TIMES. THE MAINTENANCE OF HAUL ROADS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT. THE HAUL ROAD LOCATIONS SHALL BE AS INDICATED ON THE STAGING/LAYDOWN AND ACCESS PLAN OR BY THE CONTRACTING OFFICER.
- 8

CONTRACTOR SHALL COORDINATE ACTIVITIES THROUGHOUT THE PROJECT IN A MANNER THAT ALLOWS EMERGENCY ACCESS TO ALL EXISTING ROADWAYS AT ALL TIMES WITHOUT DELAYS TO EMERGENCY VEHICLES RESPONSE TIME.
- 9

CONTRACTOR WHILE WITHIN GOODFELLOW AFB, SHALL COMPLY WITH BASE REGULATIONS PERTAINING "NO FIREARMS" AND "NO ILLEGAL DRUGS" ON BASE POLICIES.
- 10

ONLY RUBBER-TIRED VEHICLES SHALL BE ALLOWED ON EXISTING PAVEMENT THAT IS TO REMAIN.
- 11

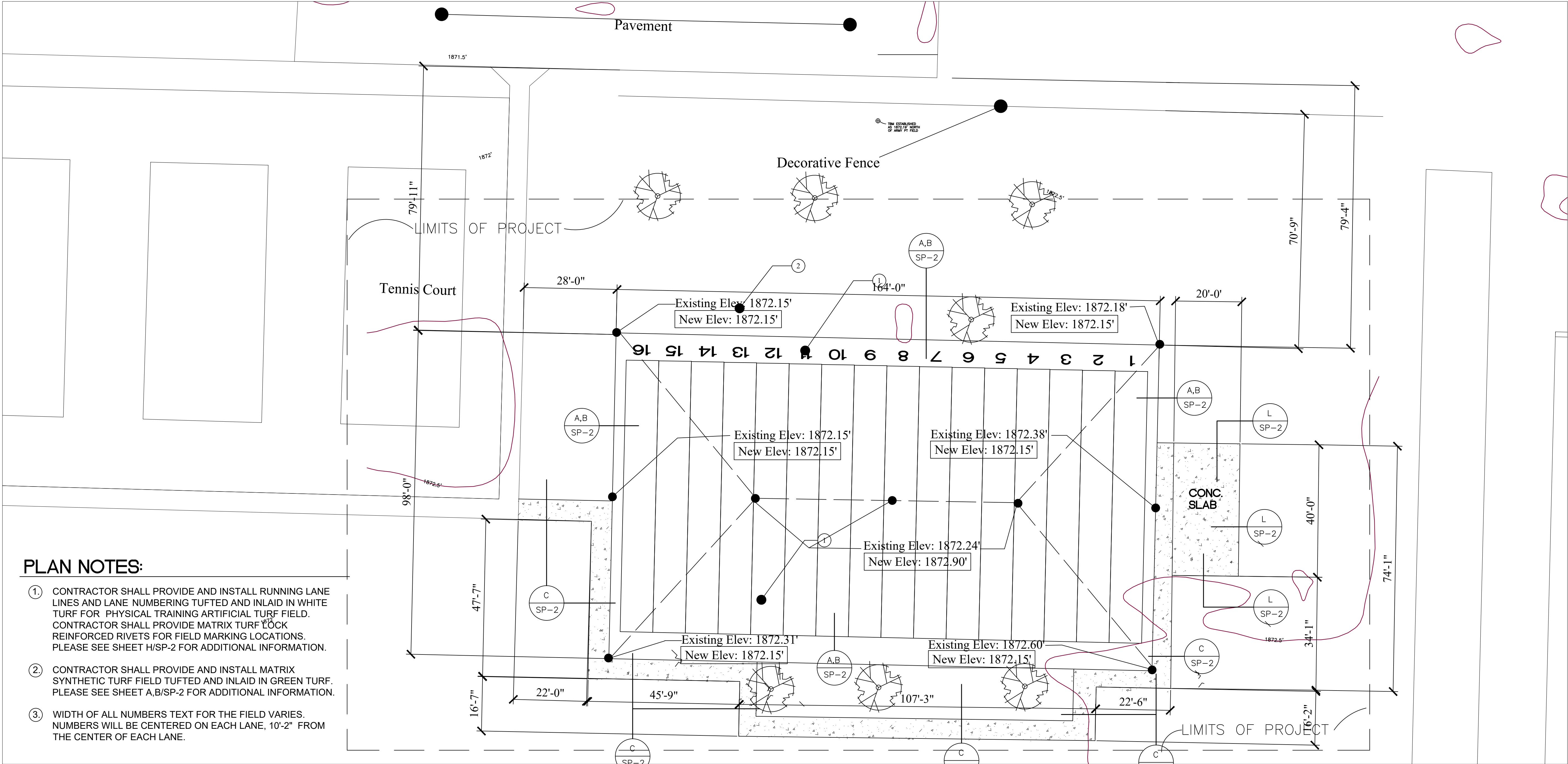
ALL CONTRACTOR OPERATIONS SHALL BE CONDUCTED AND PERFORMED IN ACCORDANCE WITH DEPARTMENT OF LABOR, OSHA REQUIREMENTS FOUND IN 29 CFR 1910 (1910.146 AND 1910.147) AND 29 CFR 1926, AND AIR FORCE OCCUPATIONAL SAFETY & HEALTH (AFOSH) AND AIR FORCE INSTRUCTION (AFI) STANDARDS INCLUDING AFI 91-203, AIR FORCE CONSOLIDATED OCCUPATIONAL SAFETY INSTRUCTION. THE CONTRACTOR SHALL ALSO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH PROJECT IDENTIFIED NATIONAL STANDARDS, MILITARY MANUALS, INSTRUCTIONS, PAMPHLETS, STANDARDS, AND HANDBOOKS, AND WITH THE EDITION IN EFFECT ON THE DATE OF THIS SOLICITATION OF THE CORPS OF ENGINEERS (COE) SAFETY MANUAL 385-1-1. ALL JOB SITES ARE SUBJECT TO INSPECTIONS BY THE DEPARTMENT OF LABOR. IN THE EVENT OF CONFLICTS BETWEEN THE OSHA STANDARDS AND THESE REQUIREMENTS, THE MOST STRINGENT SHALL APPLY.
- 12

CONTRACTOR SHALL MAINTAIN AT ALL TIMES ONE FIRE LANE FREE FROM OBSTRUCTION AND MAINTAIN ACCESS TO THE SITE AND ALL SURROUNDING ROADS AND STREETS.
- 13

GRASS AND WEEDY VEGETATION WITHIN THE AREAS UTILIZED BY THE CONTRACTOR, INCLUDING WORK AREAS, ADMINISTRATIVE AREAS, AND STORAGE AREAS, SHALL BE KEPT MOWED TO CONTROL VEGETATIVE GROWTH. VEGETATION SHALL BE MOWED WHEN IT REACHES A HEIGHT OF 6 INCHES. MOWING SHALL BE TO A HEIGHT OF 3 INCHES. MOWING SHALL BE ACCOMPLISHED WITH A ROTARY MOWER THAT LEAVES THE CLIPPINGS EVENLY DISTRIBUTED ON THE SOIL SURFACE. MOWING SHALL BE ACCOMPLISHED DURING PERIODS AND IN SUCH MANNER THAT THE SOIL AND GRASS WILL NOT BE DAMAGED. TOWED OR SELF-PROPELLED RIDING MOWERS SHALL NOT BE OPERATED WITHIN 3 FEET OF TREES OR SHRUBS. AREAS ADJACENT TO TREES AND SHRUBS SHALL BE MOWED WITH HAND-PROPELLED MOWERS.
- 14

EROSION CONTROL DEVICES SHALL BE USED FOR THE STAGING AREA AND ANY MATERIAL STOCK PILES WHEN NECESSARY TO CONTROL EROSION AND STORM WATER RUNOFF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. A SWPPP SHALL BE SUBMITTED PRIOR TO MOBILIZATION.
- 15

CONTRACTOR SHALL NOT REMOVE ANY TREES IN THE AREA.



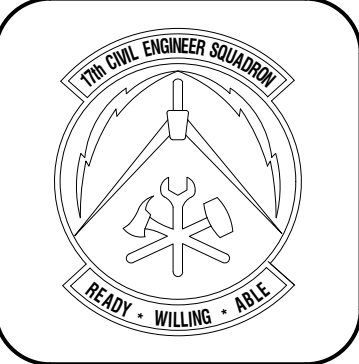
PLAN NOTES:

- 1

CONTRACTOR SHALL PROVIDE AND INSTALL RUNNING LANE LINES AND LANE NUMBERING TUFTED AND INLAID IN WHITE TURF FOR PHYSICAL TRAINING ARTIFICIAL TURF FIELD. CONTRACTOR SHALL PROVIDE MATRIX TURF LOCK REINFORCED RIVETS FOR FIELD MARKING LOCATIONS. PLEASE SEE SHEET H/SP-2 FOR ADDITIONAL INFORMATION.
- 2

CONTRACTOR SHALL PROVIDE AND INSTALL MATRIX SYNTHETIC TURF FIELD TUFTED AND INLAID IN GREEN TURF. PLEASE SEE SHEET A,B/SP-2 FOR ADDITIONAL INFORMATION.
- 3

WIDTH OF ALL NUMBERS TEXT FOR THE FIELD VARIES. NUMBERS WILL BE CENTERED ON EACH LANE, 10'-2" FROM THE CENTER OF EACH LANE.



Symbol	Description	Date	Appr

Symbol	Description	Date	Appr

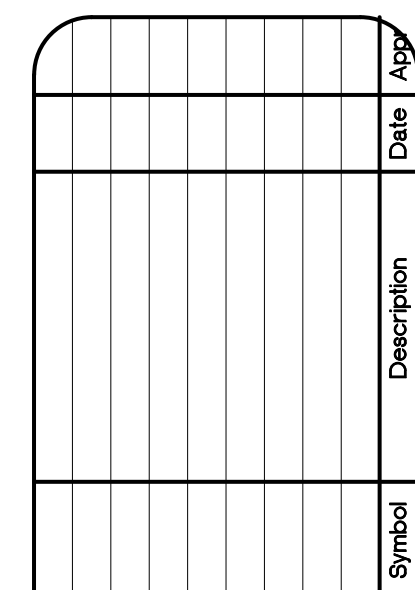
Designed by	Drawn by	Reviewed by	Submitted by

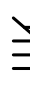
PROJECT TITLE  
CONSTRUCT ARMY PHYSICAL TRAINING (PT) FIELD  
PROJECT NUMBER: 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

Project Number:	1093157
SHEET TITLE	Site Plan
Date:	April, 2020

SEQ.	SHEET	OF
04	SP-1	07



[illegible]

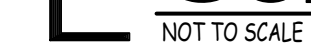
Designed by:	
Drawn by:	
Reviewed by:	
Submitted by:	

PROJECT TITLE  
CONSTRUCT ARMY PHYSICAL TRAINING  
[PT] FIELD  
PROJECT NUMBER 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

Project Number: 1093157
SHEET TITLE MISCELLANEOUS DETAILS
Date: April, 2020

SEQ.	SHEET	OF
05	SP-2	07

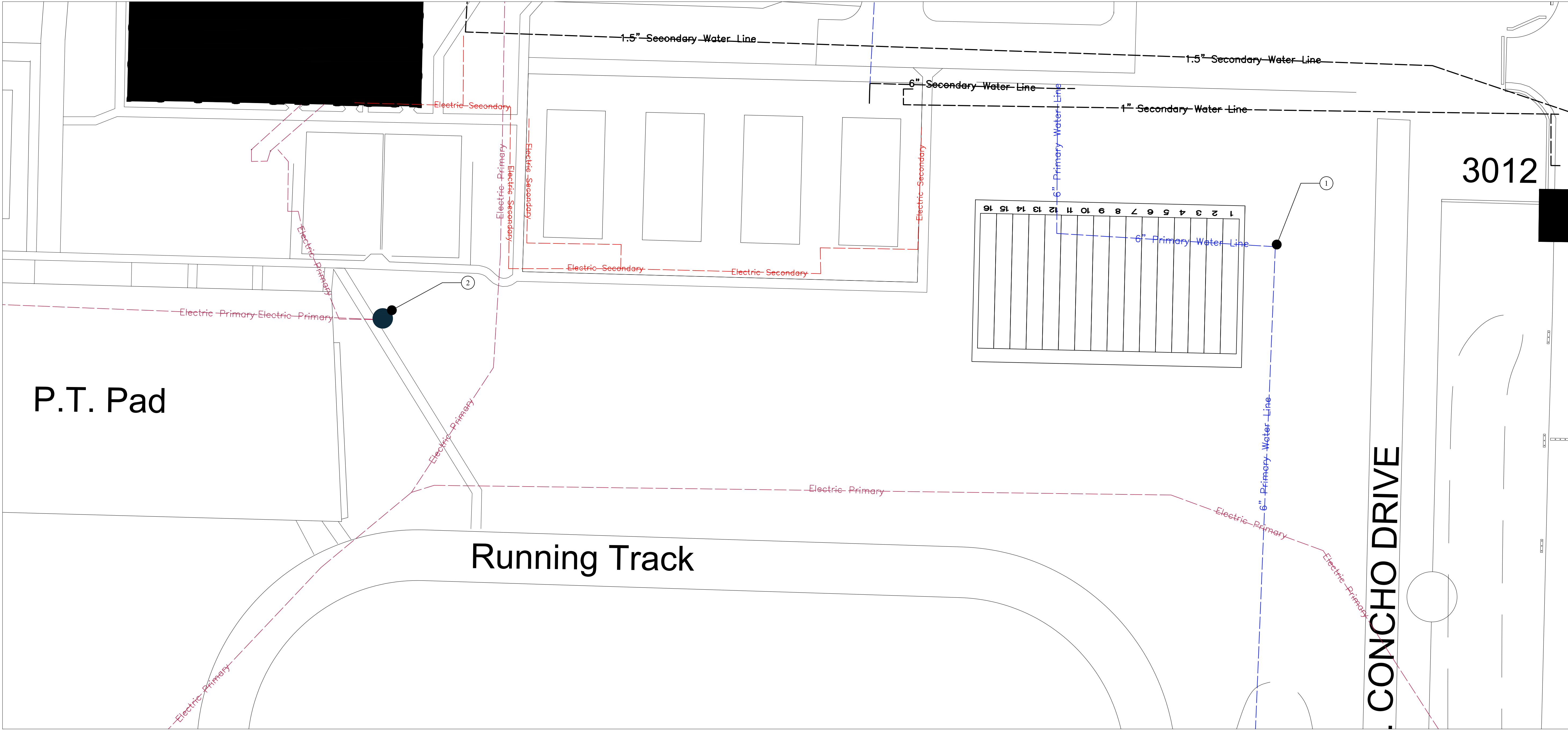
New Panel Schedule Army PT PAD												
Load Description	Note	Load	AMP	P	CKT	PHASE	CKT	P	Load Description	Note	AMP	LOAD
Lighting CKT 1		L	14.4	1	1	A	2	1	Lighting CKT 2		14.4	L
					3	B	4	3	6KVA Dry Transformer		12.06	DT
					5	C	6		6KVA Dry Transformer			
					7	A	8		6KVA Dry Transformer			
					9	B	10					
					11	C	12					
					13	A	14					
					15	B	16					
					17	C	18					
Summary by Load Type		Connected KVA										
	PHA	PHB	PH C									
L Lighting	11.966	11.966	0									
DT Dry Transformer	3.35	3.35	3.35									
Total in KVA	15.316	15.316	3.35									
		Connected Amps										
	PHA	PHB	PHC									
L Lighting	14.4	14.4	0									
DT Dry Transformer	4.02	4.02	4.02									
Total in AMP	18.42	18.42	4.02									





PLAN NOTES:

- ①
- EXISTING PRIMARY UNDERGROUND 6 INCH WATER MAIN LINE TO BE ABANDONED IN PLACE BY OTHERS.
- ②
- EXISTING TRANSFORMER, PANEL, & LIGHT CONTACTORS.



Symbol	Description	Date	Appr.

REVISIONS			
Symbol	Description	Date	Appr.

Designed by:	Drawn by:	Reviewed by:	Submitted by:

PROJECT TITLE

CONSTRUCT ARMY PHYSICAL TRAINING (PT) FIELD

PROJECT NUMBER: 1093157

17th TRAINING WING

GOODFELLOW AIR FORCE BASE, TEXAS

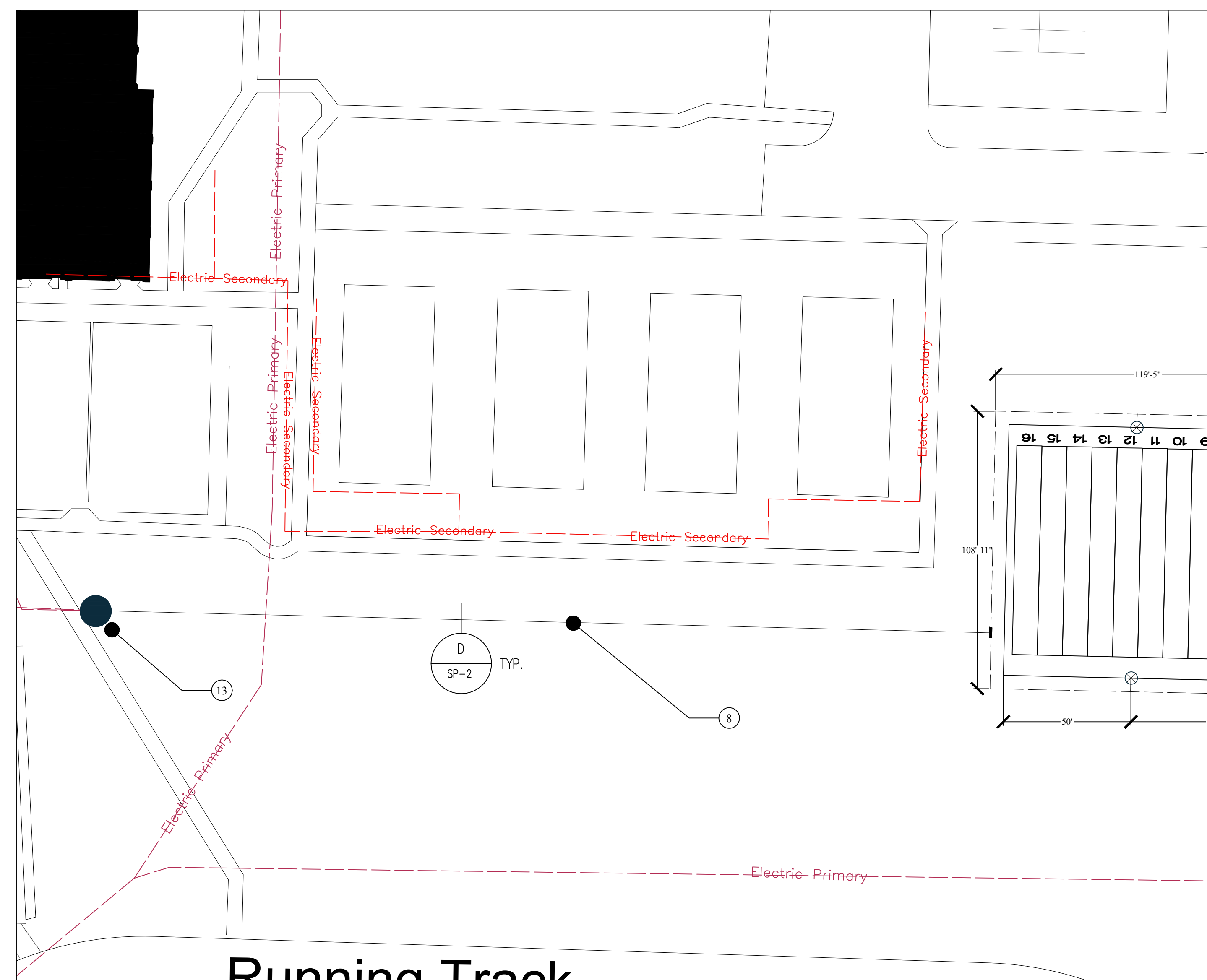
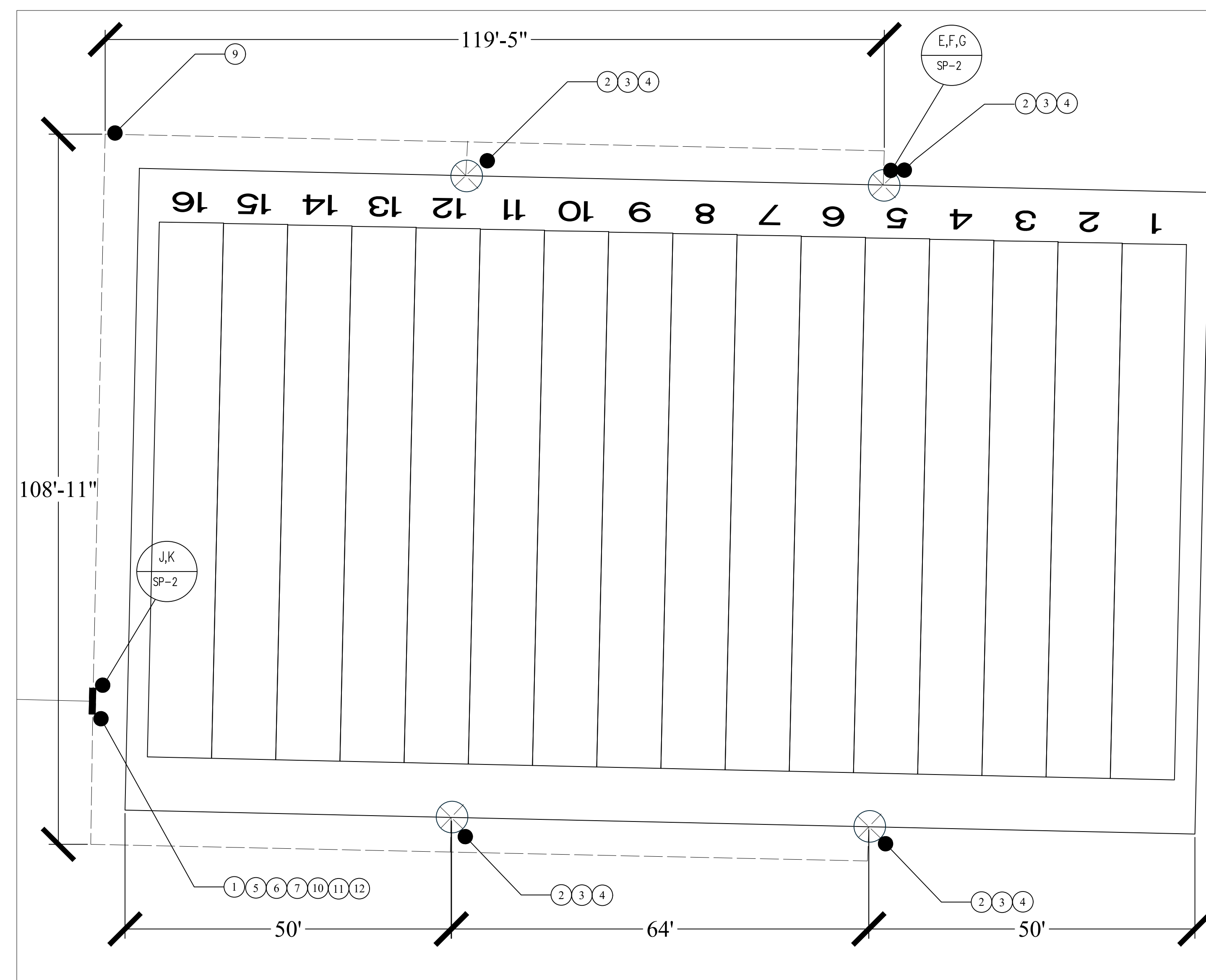
Project Number:	1093157
SHEET TITLE	Utility Site Plan
Date:	April, 2020

SEQ.	SHEET	OF
06	PE-1	07

- ①. CONTRACTOR SHALL PROVIDE AND INSTALL VOLTAGE DROP AT PROJECT LOCATION. POINT OF CONNECTION VOLTAGE IS 480/277.
- ②. CONTRACTOR SHALL PROVIDE AND INSTALL 4 ROUND TAPERED STEEL SPORTS LIGHTING POLES WITH A GALVANIZED FINISH AT 50' HIGH, AN ANCHOR BASE, WIRING HAND HOLE AND COVER.
- ③. CONTRACTOR SHALL PROVIDE AND INSTALL 16 FIXTURE MOUNTS SET AT 180 DEGREES, 4 ANGLED IRON CROSS ARMS, SIDE OF POLE MOUNTED, WITH A HOT-DIP GALVANIZED FINISH.
- ④. CONTRACTOR SHALL PROVIDE AND INSTALL 16 20" HIGH OUTPUT LED SPORTS AND FLOOD LIGHT FIXTURES WITH 4 LAMPS FOR EACH LIGHTING POLE. LAMPS RUN 440 WATTS, 120-277 VOLTS, 5700K COOL WHITE, 63657 NOMINAL LUMENS, 1500W HID REPLACE. THE FIXTURES SHALL HAVE A EPA OF 18.5 AND 463 POUNDS AT 90 MPH.
- ⑤. CONTRACTOR SHALL PROVIDE AND INSTALL 2 WEATHERPROOF OUTLETS (GROUND FAULT) FOR FUTURE USE OF EQUIPMENT.
- ⑥. CONTRACTOR SHALL PROVIDE AND INSTALL SMALL DRY TRANSFORMER, 6KVA 3Ø 480/277 IN PRIMARY AND 120/208 ON THE SECONDARY.
- ⑦. CONTRACTOR SHALL PROVIDE AND INSTALL ASTRONOMIC DIAL TIMER ON LIGHTING CONTROL PANEL.
- ⑧. CONTRACTOR SHALL PROVIDE AND INSTALL #6 THHN COPPER WIRE WITH NONMETALLIC FLEXIBLE TUBING. TUBING MUST BE 1-1/4" IN DIAMETER. WIRE MUST CONNECT WITH NEW VOLTAGE DROP AND DISTRIBUTION PANEL. LOCATION IS 350' FROM EXISTING PANEL.

9. CONTRACTOR SHALL PROVIDE AND INSTALL #12 THHN COPPER WIRE WITH NONMETALLIC FLEXIBLE TUBING. TUBING MUST BE 3/4" IN DIAMETER. WIRE MUST CONNECT FROM DISTRIBUTION PANEL TO EACH EXTERIOR LIGHT POLE/FIXTURE.
10. CONTRACTOR SHALL PROVIDE AND INSTALL DISTRIBUTION PANEL, THREE PHASE, 4 WIRES WITH A MAIN BREAKER OF 50 AMP.
11. CONTRACTOR SHALL PROVIDE AND INSTALL SINGLE POLE, 277 V 20 AMP BREAKER IN THE PANEL WITH A "ON OFF" SELECTOR SWITCH.
12. CONTRACTOR SHALL PROVIDE AND INSTALL NEW COMBINATION LIGHTING PANEL/DISCONNECT SWITCH FOR THE LIGHTINGS. BOTH PANEL AND DISCONNECT SWITCH WILL BE CONTROLLED BY A SINGLE PHOTO-CELL AND A MANUALLY OPERATED ELECTRIC 277 V 120 MINUTE TIMER.
13. EXISTING TRANSFORMER, PANEL, & LIGHT CONTACTORS.

1. ALL EQUIPMENT MUST BE WATERPROOF.

[illegible][illegible]

Designed by:
Drawn by:
Reviewed by:
Submitted by:

PROJECT TITLE  
CONSTRUCT ARMY PHYSICAL TRAINING  
(PT) FIELD  
PROJECT NUMBER: 1093157  
17th TRAINING WING  
GOODFELLOW AIR FORCE BASE, TEXAS

Project Number: 1093157

<b>SHEET TITLE</b>
Utility Site Plan

Date: April, 2020

SEQ.	SHEET	OF
07	PE-2	07