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SAMPLING & ANALYSIS PLAN

AIRCRAFT PARTS STORAGE BUILDING & UTILITY SERVICE EXTENSION, FTW 336A FORT WAINWRIGHT, ALASKA

TECHNICAL SPECIFICATIONS SECTION 31 09 20.00 29

USACE Contract Number W911KB-10-C-0007
Doyon Utilities Contract Numbers J101395/J101396/J101397

Rockwell E&C Job Numbers 1008 & 1047

Prime Contractor:

Tunista Arctic Rim / TBI Construction, LLC
301 Calista Ct
Anchorage, AK 99518-3028

Consultant:

ROCKWELL ENGINEERING & CONSTRUCTION SERVICES, Inc.

Shann Jones
Environmental Professional

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ABBREVIATIONS & ACRONYMS

ADEC	Alaska Department of Environmental Conservation
APSB	Aircraft Parts Storage Building
ASTM	American Society for Testing and Materials
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CO	Contracting Officer
COC	Chain of Custody
Cy	Cubic Yards
DPW	Directorate of Public Works
DRO	Diesel Range Organics
DU	Doyon Utilities
EPA	Environmental Protection Agency
FSP	Field Sampling Plan
FTWW	Fort Wainwright
GRO	Gasoline Range Organics
mL	Milliliter
mm	Millimeter
PID	Photoionization Detector
ppm	Parts Per Million
POL	Petroleum, Oils and Lubricants
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
QAR	Quality Assurance Representative
QC	Quality Control
QCSM	Quality Control Systems Manager
RRO	Residual Range Organics
Rockwell E&C	Rockwell Engineering & Construction Services, Inc.
SAP	Sampling and Analysis Plan
SGS	SGS North America, Inc.
SHP	Safety & Health Program
SSSHP	Site Specific Safety & Health Plan
TAR/TBI	Tunista Arctic Rim / TBI Construction LLC
TS	Technical Specifications
USACE	United States Army Corps of Engineers
UST	Underground Storage Tank

EXECUTIVE SUMMARY

The purpose of this project is to construct a 20,000 square foot Aircraft Parts Storage Building (APSB) for the Aviation Task Force on Fort Wainwright, Alaska. The project includes the building, exterior storage parking, site improvements and force protection measures.

Major work areas are:

- Constructing the new APSB, north of Building 2079.
- Constructing the accompanying parking and service yards for the APSB west of Building 2079 and north of Montgomery Road.
- Constructing of an enclosed outdoor storage area directly north of the new APSB.
- Extension of Doyon Utilities water, steam, sewer and electrical services from utilidor located immediately west and north of Building 2080

The United States Army Corps of Engineers (USACE) contracted Tunista Arctic Rim / TBI Construction LLC (TAR/TBI) to perform all work under contract number W911KB-10-C-0007. TAR/TBI subcontracted Rockwell Engineering and Construction Services, Inc. to field screen and headspace sample excavated soils for petroleum, oil, and lubricant (POL) contamination under TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination. Rockwell E&C will not be onsite for any demolition or removal of asbestos or lead containing materials.

Doyon Utilities contracted Tunista Arctic Rim / TBI Construction LLC (TAR/TBI) to perform all work under contract numbers J101395, J101396 and J101397. TAR/TBI subcontracted Rockwell Engineering and Construction Services, Inc. (Rockwell E&C) to field screen and headspace sample excavated soils for petroleum, oil, and lubricant (POL) contamination in accordance with the Fort Wainwright post-wide Sampling and Analysis Plan (SAP).

Field screening and soil sampling will be conducted in general accordance with: TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination; this Sampling and Analysis Plan (SAP); and the Alaska Department of Environmental Conservation (ADEC) approved Quality Assurance Program Plan (Appendix A).

TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination Paragraph 3.2 specifies that no contaminated soil is expected during the project outside of the 300 cubic yards identified in TS Section 02 61 13. When contamination is encountered, segregation and sampling will be conducted as outlined in TS 31 09 20.00 29, Paragraph 3.3.4 and TS 02 61 13, Paragraph

3.4. Should Rockwell E&C encounter visible stains, smell of fuels, or volatiles, or readings above background in any field screening test, Rockwell E&C will immediately notify TAR/TBI. TAR/TBI will immediately notify the USACE/Contracting Officer (CO) and/or the Directorate of Public Works (DPW) Environmental Office by telephone and in writing. TAR/TBI will re-evaluate the SHP as appropriate and await direction from the USACE CO before proceeding with the excavation. If contaminated soil is encountered within the site boundaries, the USACE/CO and/or DPW Environmental Office may direct sampling and analysis not outlined in this SAP. This additional sampling and analysis will be directed in writing by the CO and/or DPW Environmental Office.

Excavated contaminated and/or potentially contaminated soils, if encountered, will require segregation, stockpiling, characterization, treatment, and disposal in accordance with the State of Alaska laws and ADEC regulations.

Laboratory samples, when needed, will be collected in general accordance with the ADEC approved QAPP and the ADEC Underground Storage Tank Procedures Manual, dated November 7, 2002. Rockwell E&C will collect 10% QC duplicates and 5% trip blanks as required by ADEC 18 AAC 75 and the UST Procedures Manual.

Rockwell E&C will provide a Field Report covering all site assessment activities conducted under and in accordance with TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination, Paragraph 3.7 and the post-wide SAP. The Final Closure Report covering all sampling and site assessments activities conducted under TS 02 61 03 will be submitted separately as necessary. A Final Closure Report covering all sampling and site assessments activities conducted under post-wide SAP will be submitted separately as necessary.

1.0 INTRODUCTION

This SAP includes the Field Sampling Plan (FSP) in Section 2.0 and the QAPP in Appendix A. The FSP describes the field screening and headspace sampling methods and frequencies to be used during excavation activities as well as procedures for collecting analytical soil samples, when necessary.

1.1 Purpose

This SAP contains the methods and procedures to perform a general site inspection, field screening during excavation to identify soil contamination, and analytical sampling for soil characterization, if necessary.

1.2 Project Organization

The Department of the Army is the landowner. The USACE awarded this project to TAR/TBI under contract number W911KB-10-C-0007. TAR/TBI subcontracted Rockwell E&C to prepare plans, perform field screening tests and laboratory sampling as specified in TS Section 31 09 20.00 29, Field Screen Testing of Soils for POL Contamination, Paragraph 3.3. TAR/TBI will retain Rockwell E&C to prepare work plans, perform field screening tests and laboratory sampling as specified in TS Section 02 61 13, Excavation and Handling of Contaminated Material, Paragraph 3.4, and as directed by the USACE/CO.

Doyon Utilities contracted Tunista Arctic Rim / TBI Construction LLC (TAR/TBI) to perform all work under contract numbers J101395, J101396 and J101397. TAR/TBI subcontracted Rockwell E&C to field screen and headspace sample excavated soils for petroleum, oil, and lubricant (POL) contamination in accordance with the Fort Wainwright post-wide Sampling and Analysis Plan (SAP).

Chart 1.1 on page 3 represents the abbreviated chain of command for this project.

1.3 Related Documents

- Contract – Aircraft Parts Storage, W911KB-10-C-0007. TS Sections:
  - 01 19 30.01 29 Special Items;
  - 01 33 00 Submittal Procedures;
  - 01 35 26 Governmental Safety Requirements

01 57 20.00 10 Environmental Protection;

01 57 34.00 29 Storm Water Pollution Prevention Measures;

02 61 13 Excavation and handling of Contaminated Material; and,

31 09 20.00 29 Field Screen Testing of Soils for POL Contamination.

- Doyon Utilities Contracts J101395, J101396 and J101397.
- Fort Wainwright post-wide Sample and Analysis Plan.
- FTW 336A Aircraft Parts Storage, W911KB-09-R-0007.
- Safety & Health Requirements Manual, EM 385-1-1. US Army Corps of Engineers, November 3, 2003.
- Oil and Hazardous Substances Pollution Control, 18 AAC 75. Alaska Administrative Code, as amended through October 9, 2008.
- Underground Storage Tanks, 18 AAC 7. Alaska Administrative Code, as amended through October, 2006.
- Underground Storage Tank Procedures Manual. Alaska Department of Environmental Conservation, November 7, 2002.
- Description and Identification of Soils (Visual-Manual Procedure) ASTM D 2488. American Society for Testing and Materials Publication, 1996.

1.4 Scope of Work

The scope of work for this project consists of the following tasks:

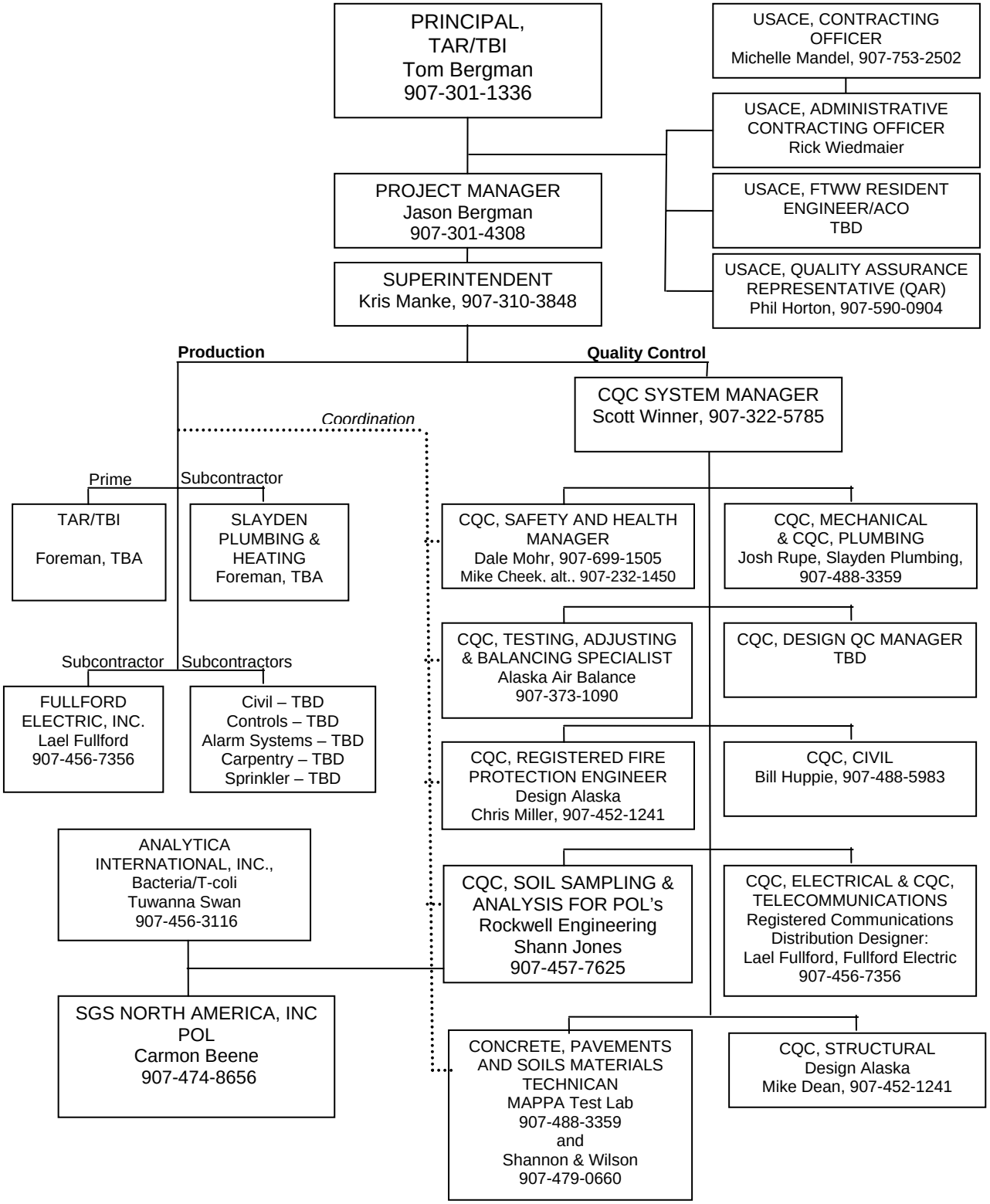
- ✓ Task 1: Perform a general site inspection and field screening of excavated soil for POL contamination.
- ✓ Task 2: If suspect or contaminated soil is encountered, segregate by field screening, and stockpile contaminated soil. Collect laboratory confirmations soil samples at the direction of the USACE/CO and/or DPW Environmental Office.
- ✓ Task 3: Prepare and submit deliverables to the USACE/CO and/or DPW Environmental through TAR/TBI, including this SAP, daily field screening results, laboratory results, a Field Report, and Closure Reports (as required).

Site work will occur for three excavations on this project. The first consists of excavating approximately 6,700 cy of soil at the APSB site. The APSB site sits on the north side of Montgomery Road, east of its intersection with Luzon Avenue. The new utilities run between the APSB and the existing utilidor on the north side of Montgomery Road. The second excavation for the parking lot located west of Buildings 2079. Approximately

2,100 cy of soil will be excavated at this site. The third excavation is for the enclosed outdoor storage area directly north of the new APSB. Approximately 2,900cy of soil will be excavated at this site. Based on project drawings, the typical excavation depth ranges from approximately three (3) to 10 feet below grade.

Rockwell E&C's scope of work does not include any testing or screening of asbestos or lead containing materials; and Rockwell E&C will not be present during asbestos or lead removal activities for health and safety reasons.

Chart 1.1: Project Chain of Command



The resumes of Rockwell E&C personnel are provided in Appendix F of this submittal and the Consultants Qualifications submittal, provided separately.

1.5 Site Description

Fort Wainwright lies east of downtown Fairbanks, Alaska. The proposed 20,000 square foot APSB is located on Montgomery Road, north of Building 2079 and west of Building 2080. For a work location map, see Sheet LV1.01 in Appendix B. There are associated sections of road/driveway, parking lots, sidewalks, and utilities that will be removed and replaced or disposed of during construction.

According to Sheet 3.01 *FTW 336A Aircraft Part Storage RFP,* the surface of the groundwater ranges from 11 to 16 bgs, fluctuates seasonally and should not impact excavation and backfill work. TAR/TBI does not anticipate encountering groundwater during excavation. Upon the discovered of groundwater, Rockwell E&C personnel will notify the TAR/TBI Superintendent and/or CQSM. Subsequently, TAR/TBI will prepare a dewatering plan and permit for ADEC Approval.

2.0 FIELD SAMPLING PLAN

2.1 Health and Safety

Fieldwork will be completed in general accordance with the USACE Safety & Health Requirements Manual, EM 385-1-1, 2003. Rockwell E&C will comply with TAR/TBI's Safety and Health Program and Site Specific Safety and Health Plan.

TAR/TBI is responsible for acquiring authorization to dig and utility clearances. It is anticipated excavations will consist of open pits, deep trenches and manholes up to approximately 15 feet below ground surface; sloping or shoring of the excavation will be required. Rockwell E&C personnel have been trained to evaluate unsafe excavation conditions and will not enter an unsafe excavation area. Screening and sampling in excavations greater than four (4) feet deep below grade shall be completed from the excavation bucket when entering trenches is unsafe. Rockwell E&C will not be working in areas requiring confined space entry procedures.

Rockwell E&C personnel will wear personal protective equipment consisting of hardhats, hearing protection, steel toed boots, blaze orange safety vests, and safety glasses. Rockwell E&C personnel will make eye contact with operators and wait until the area is safe prior to moving near or around equipment. Upon discovery of a contaminated area, Rockwell E&C shall consult with the TAR/TBI SSHO regarding appropriate PPE that effectively prevents or reduces exposure to hazards and meets the requirements of 29 CFR 1910.132-138.

Accidents and emergencies will be reported to TAR/TBI immediately. Rockwell E&C will complete the USACE Immediate Report of Accident POD Form 265-R, June 2007 and an Accident Investigation Report Eng. Form 3394 (March 1999 Version 2). The completed forms will be submitted to TAR/TBI to be forwarded to the USACE/CO. These forms are presented in Appendix C.

2.2 Classification of Soil Contamination

No contaminated soil is anticipated at the site. During field screening, soil will be classified according to the following descriptions:

- *Non-Contaminated*: No visible stains, no smell of fuels or volatiles, and no PID readings above 20 ppm.
- *Potentially Contaminated (Suspect)*: Visible stains, smell of fuels or volatiles and/or PID readings greater than 20 parts per million and less than 100 ppm.
- *Contaminated*: Visible stains, smell of fuels or volatiles and/or PID readings greater than 100 ppm.

If visible stains, smells of fuels or volatiles, or readings above background are discovered in any field-screening test, Rockwell E&C will notify TAR/TBI, who will then notify the USACE/CO and/or DPW Environmental Office immediately, by phone and in writing, as per TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination Paragraph 3.2.2. TAR/TBI will then re-evaluate the SHP and SSSHP, as appropriate. Rockwell E&C will await direction from the USACE/CO and/or DPW Environmental Office through TAR/TBI before the excavation continues.

The criterion for identifying contaminated soil stated in TS Section 31 09 20.00 29 Paragraph 3.3 relies on laboratory testing. Meeting or exceeding ADEC cleanup levels

in the excavation area and stockpiles can only be determined by laboratory testing, not field screening techniques alone.

Whenever Rockwell E&C personnel suspect or have knowledge of a leak, spill, or release of oil, hazardous substance, or regulated substance not previously identified in the contract documents, (s)he will immediately notify TAR/TBI by telephone then prepare an ADEC Oil and Hazardous Substances Spill Notification Form (Appendix C). Rockwell E&C will submit the completed form to TAR/TBI, who will hand deliver or FAX the report to the USACE/CO and/or DPW Environmental Office. The construction site will have the capacity to control, contain, and remove such spills if they occur. Spill kits will be readily available and all employees on site will be trained in their use. Spills in excess of reportable quantities will be reported as required in 40 CFR 110.

TAR/TBI SSHO, Dale Mohr (Alternate: Kris Manke, Superintendent) will be responsible to report any spills or hazardous substance releases and will follow up with complete documentation. The individual will immediately notify the CO, FTWW Fire Department, and DPW Environmental. DPW Environmental will be responsible for reporting to regulatory agencies by legally required Federal, State, and local reporting channels (including the National Response Center) if a reportable quantity is released to the environment. Kris Manke, Superintendent, will be responsible for implementing and supervising the containment and clean-up as outlined in the Environmental Protection Plan (EPP). Rockwell E&C will be the designated spill contractor and will respond upon direction from the USACE/CO and/or DPW Environmental through TAR/TBI. Any field screening or clean-up activities related to a spill or release are not services covered under this SAP.

2.3 Field Screening and Headspace Sampling

Rockwell E&C will field screen during all new excavations associated with this Aircraft Parts Storage Building project. Rockwell E&C recommends one working day advanced notification of upcoming excavation activities when such activities do not occur on successive dates. For ongoing excavation (i.e., consecutive days), the TAR/TBI Project Manager and/or Superintendant shall notify Rockwell E&C personnel on-site as to the excavation plans for the next business day.

2.3.1 Equipment and Instruments

Rockwell E&C will use BW Gas Alert Micro5 PIDs, which are intrinsically safe. The PID will be calibrated daily in 0 ppm free air and 100 or 106 ppm isobutylene, using a response factor of 1.0, according to the manufacturer's instructions.

Latex or nitrile gloves will be worn during all field screening activities. Clean hand tools will be used to unearth sampling locations. Paper towels or a stiff brush will be used to remove loose soil from the tools before sampling each location. A plastic Ziploc® bag will be used to hold headspace samples. If contaminated soil is encountered, tools will be decontaminated in general accordance with the QAPP.

2.3.2 Field Screening Procedures

All field screening procedure will be in accordance with the post-wide SAP. Rockwell E&C personnel will maintain a continuous presence during excavation. Field screening personnel will consist of Rockwell E&C permanent environmental staff and qualified seasonal staff. Soil will be screened during excavation by using the PID and a small funnel to contain vapors. When safe to enter the vicinity of heavy equipment, Rockwell E&C personnel will place the large opening of the funnel in the freshly exposed soil and insert the PID probe into the small opening to measure petroleum vapors collecting within the funnel. This method prevents soil particles from coming into contact with the PID probe, minimizes the effects of wind blowing the vapors away, and reduces the chance of erroneous measurements from ambient air, which may contain equipment exhaust fumes or other extraneous contaminants.

2.3.3 Headspace Sampling Procedures

The headspace procedure will be in accordance with the QAPP and post-wide SAP. The procedure consists of partially filling a clean Ziploc freezer bag with the sample to be screened. Headspace vapors will be allowed to develop in the bag for at least 10 minutes, but no longer than one (1) hour. The soil temperature will be warmed to at least 40°F. The bag will be agitated for approximately 15 seconds just prior to screening to assist volatilization. The PID probe will then be carefully inserted into the bag to measure headspace gases. The highest PID reading will be recorded along with soil temperature on a daily field screening report sheet *(*Appendix D).

2.3.4 Screening and Sampling Frequency

Table 2.1 below lists the minimum frequency of headspace samples to be collected.

Table 2.1: Minimum Field Sampling Frequency

Sampling Areas	Field Screening During Excavation (Funnel)	Headspace Sampling	
		During Excavation	Final Excavation Limits
Building Excavations and Utility Trenches			
Clean/background	1/10 yd^3	1/30 yd^3	1/100 feet length on side walls and 1/250 ft^2 on floor
Suspect/ Potentially Contaminated/ Contaminated	1/2 yd^3	1/10 yd^3	1/100 feet length on side walls and 1/250 ft^2 on floor

2.4 Laboratory Sampling and Testing

As per TS Section 02 61 13, Excavation and Handling of Contaminated Materials, Paragraph 1.6, collection and laboratory testing of soil samples is necessary, and shall be carried out only when directed in writing by the USACE/CO and/or DPW Environmental Office. Such required sampling shall be conducted in accordance with 18 AAC 75 and the post-wide SAP.

Contaminated and potentially-contaminated soils are anticipated at the site as per TS Section 02 61 13, Excavation and Handling of Contaminated Materials, Paragraph 1.5. When encountered, these soils will be segregated using the PID and placed into a temporary stockpile at a location selected by the USACE/CO and/or DPW Environmental, and indicated in the FTW 336A Environmental Protection Plan. All temporary potentially contaminated stockpiles will be constructed according to ADEC regulations 18 AAC 78 and will be lined with a minimum of 10 mil plastic and covered. An earthen berm underlying the plastic liner will contain all soil. **Separate stockpiles**

will be maintained for contaminated and potentially-contaminated soils screened from the USACE portion of this project, and contaminated and potentially-contaminated soils screened from the DU portion of this project.

2.4.1 Soil Sampling Procedures

When directed by the USACE/CO and/or DPW Environmental, Rockwell E&C will collect soil samples for laboratory testing using the procedures outlined in the UST Procedures Manual, and in accordance with the post-wide SAP. All samples will be grab samples. Samples will be obtained from freshly uncovered soil.

Soil samples from excavation equipment buckets must be obtained from the center of the bucket and away from the bucket sides; at least six (6) inches of soil must be removed immediately before collection. For stockpile sampling a minimum of 18 inches of soil will be removed immediately before collection.

To minimize volatilization, the lab jars will be filled in order of decreasing analytical volatility. Soil samples will be handled using disposable gloves. All jars will be filled quickly and completely to eliminate excess headspace within the jar.

Sample jars will be properly labeled and placed into a pre-chilled cooler. The chilled temperature within the cooler will be maintained at approximately 4^{o}C using frozen gel packages during transportation to SGS North America, Inc. (SGS), the laboratory subcontracted for this project. A signed Chain-of-Custody form will accompany the samples to the lab. Appendix E presents SGS' Laboratory Certifications.

2.4.2 Laboratory Testing

Soil samples will be tested for the following parameters using the methods listed when directed by the USACE/CO and/or DPW Environmental:

- ✓ GRO by AK101
- ✓ DRO by AK102
- ✓ RRO by AK103
- ✓ BTEX by SW 8021B
- ✓ Polycyclic Aromatic Hydrocarbons (PAH) by EPA Method 8270 SIMS
- ✓ Lead by EPA Method 6020
- ✓ Other analytes as requested by USACE, ADEC, EPA or DPW Environmental

2.4.3 Required Sample Frequency

The number of primary soil samples and sampling locations will be determined by the USACE/CO and/or DPW Environmental when contamination is encountered or suspected. Rockwell E&C will perform required post excavation (excavation limit sampling) in addition to stockpile sampling to demonstrate complete removal or quantify the levels of remaining POL contaminated soils. Stockpile sampling will be conducted in accordance with 18 AAC 78.605 (c), "For untreated stockpiled soil, at least two grab samples must be collected from stockpiles of 50 cubic yards or less, with at least one additional sample collected from each additional 50 cubic yards of soil or portion thereof over the initial 50 cubic yards".

Post excavation sampling will be conducted in accordance with 18 AAC 78.090 (d)(2)(B)(ii), "…an excavated pit area equal to or greater than 250 square feet, at least two samples must be collected from the pit area as required under (i) of this subparagraph; one additional sample must be collected for each additional 250 square feet of pit area, or portion thereof over the initial 250 square feet, at points where contamination is most likely to be present, as determined by field screening conducted as required by the *UST Procedures Manual*; for example, if the total pit area is 1,270 square feet, five additional samples are required".

Quality control sampling is not stated under TS Section 31 09 20.00 09 Field Screen Testing of Soils for POL Contamination. ADEC 18 AAC 75 and the UST Procedures Manual require field QC sampling of 10 percent field duplicates (one per set of 10 samples) for each analytical method and 5 percent trip blanks (one per set of 20 volatile samples). Rockwell E&C will collect 10 percent QC duplicates and 5 percent trip blanks as required by ADEC 18 AAC 75 and the UST Procedures Manual if laboratory sampling is necessary.

Quality Assurance sampling is not stated under TS Section 31 09 20.00 09 Field Screen Testing of Soils for POL Contamination. QA sampling consists of 10% triplicate sample collection with the QA sample analyzed at a laboratory selected by the USACE and/or DPW Environmental. QA sampling will occur only at the direction of the USACE/CO and/or DPW Environmental.

2.4.4 Limits of Data Acceptability

Qualitative and quantitative quality assurance objectives are precision, accuracy, completeness, representativeness, and comparability.

Rockwell E&C will review the laboratory results for completeness, accuracy, and unexpected results. All holding times to extract and analyze will be reviewed. QC data will be provided by SGS, which will report whether all acceptance criteria were met. The practical quantitation limits will be checked as to whether the limits are within acceptable ranges. The lab data report will be reviewed as to whether it meets the requirements for data reporting, Section 8.4 UST Procedures Manual.

The analytical results will be reviewed to check whether the results generally agree with field observations and screening results. Corrective action will be initiated if the inconsistencies between the laboratory results and the field observations and screening cannot be accounted for or resolved. If necessary, corrective action could include re-analysis of samples by the laboratory or recollection of the samples from the site.

2.5 Quality Control (QC)

Rockwell E&C will perform *preparatory* quality control measures before beginning work. This includes, but is not limited to reviewing all procedures outlined in the SAP by field personnel; reviewing plans and specs applicable to Rockwell E&C work; reviewing project drawings; and equipment checks. The equipment and/or materials check includes gathering and testing equipment/materials to be used during field activities before excavation is scheduled to begin. Rockwell E&C will attend the preparatory meeting conducted by the Quality Control Systems Manager (QCSM), as required.

Initial quality control measures will be taken to ensure accurate field data is being collected. These measures will include determining if PID readings are logical, calibrating the PID(s) to be used, and filling out daily QC reports. As part of Rockwell E&C's field procedures, a bound daily logbook will be used to record field screening activities.

For safety, a daily health and safety inspection report (Appendix D) will be completed before any field Rockwell E&C personnel begin work. Rockwell E&C personnel will

review contractor health and safety plans, and attend contractor safety meetings when they are scheduled to be on the job site.

Follow up quality control measures will be taken to verify the field data collected during soil screening. Rockwell E&C will complete a daily quality control report, a field screening report (Appendix D) and a site drawing or sketch showing field screening and sampling locations. The daily QC report, field screening report, and site drawing(s) will be copied and given to the TAR/TBI QCSM at the end of each day or the following day. Rockwell E&C field personnel will report to their office and speak with a supervisor at least once daily. Any problems will be reported to a Rockwell E&C supervisor and TAR/TBI as soon as time allows.

All field activities will be reviewed in order to ensure field procedures outlined in the SAP were followed throughout the duration of data collection. Also, review of the communication of problems, if any, encountered during soil screening will be performed to determine if procedural changes are needed. The discovery of any "out of control" situation requires a written notification to Rockwell E&C management.

3.0 REPORTING

Rockwell E&C will prepare and submit a copy of the draft and final Field Report to the USACE/CO and/or DPW Environmental through TAR/TBI as per the requirements described in TS Section 31 09 20.00 29 Field Screen Testing of Soils for POL Contamination Paragraph 3.7.2 or the post-wide SAP, as appropriate The report will include, at a minimum, the information described in TS Section 31 09 20.00 29, Paragraph 3.7.1 subparagraphs *a* through *i*:

a) Owner's name and address;
b) Operator's name and address (if different from above);
c) Name and business address of all supervisors of site assessment;
d) Scaled site sketch;
e) Photographic history
f) Local climatological conditions during on site work;
g) Field screening information;
h) General site inspection; and,
i) Field notes.

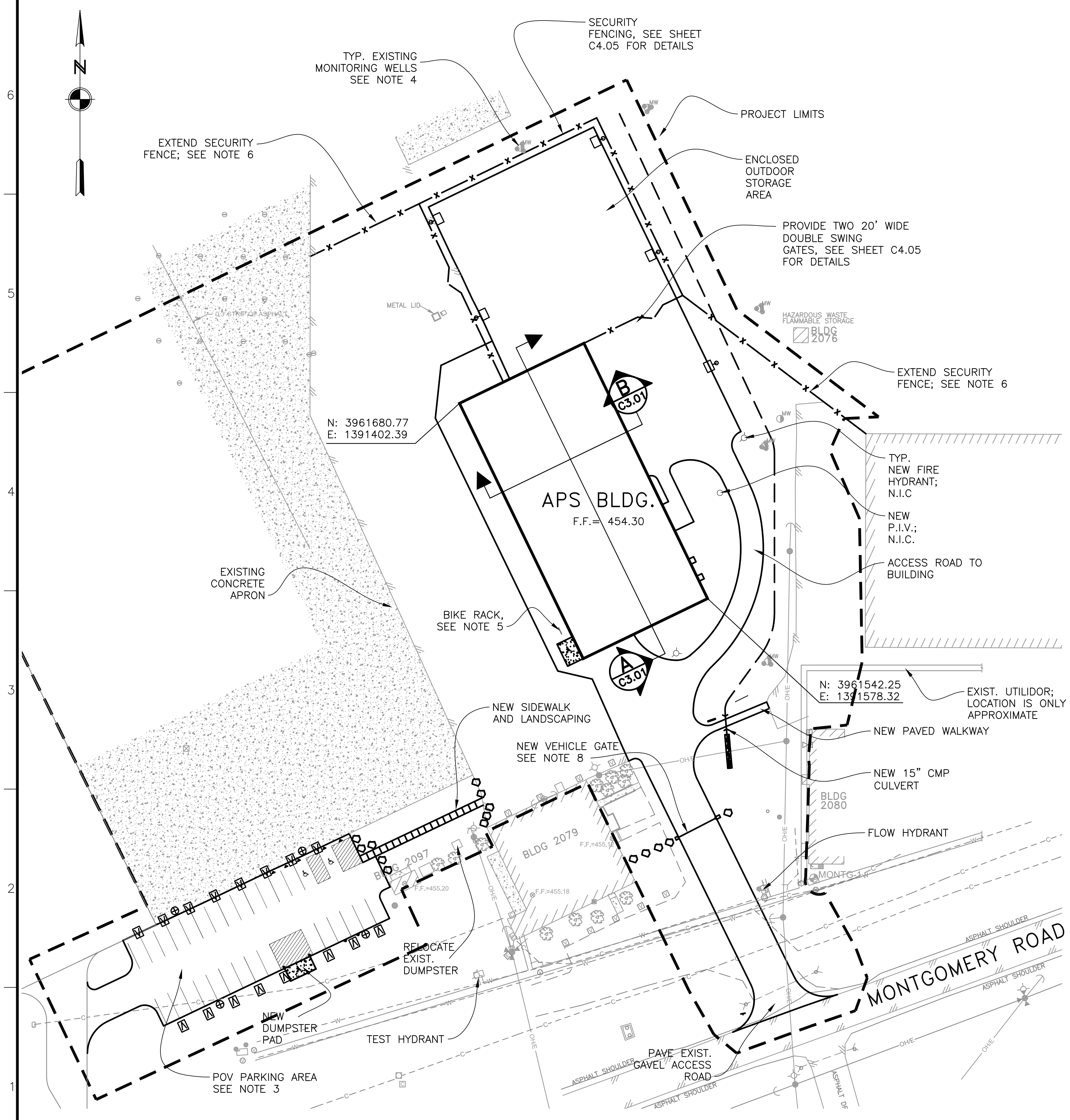
Should TAR/TBI be directed by the USACE/CO to excavate and handle contaminated material as specified in TS Section 02 61 13, Rockwell E&C will send a Closure Report to the USACE/CO via TAR/TBI after completion of all such work at the site. The report will include, at a minimum, the information described in TS Section 02 61 13, Paragraph 3.6 subparagraphs *a* through *h*:

a) Cover letter with verifying signature;
b) Narrative report;
c) Copies of all test results;
d) Copies of all manifests and land disposal restriction notifications;
e) Sign copies of all final disposal certifications;
f) Waste profile sheets;
g) Scale drawings; and,
h) Photographic log.

Should TAR/TBI be directed by the DPW Environmental Office to excavate and handle contaminated material as specified in post-wide SAP, Rockwell E&C will send a Closure Report to the DPW Environmental Office TAR/TBI after completion of all such work at the site, if requested. The report will include, at a minimum:

a) Cover letter with verifying signature;
b) Narrative report;
c) Copies of all test results;
d) Copies of all manifests and land disposal restriction notifications;
e) Sign copies of all final disposal certifications;
f) Waste profile sheets;
g) Scale drawings; and,
h) Photographic log.

Rockwell E&C does not anticipate any correspondence with other government agencies; however, copies of any such correspondence will be furnished to the Contracting Officer immediately upon issue or receipt. Any correspondence with ADEC shall be through the USACE/CO. Cover letters shall be appropriately addressed with “TO:” and “THROUGH:” headings.



OVERALL SITE PLAN

1" = 40'

0 20 40 80 120 160

GRAPHIC SCALE

NOTES:

1. SEE SHEET D1.01 FOR LEGEND FOR EXISTING AND SHEET C2.02 FOR NEW.

2. PERMANENT UTILITY SYSTEMS (WATER, SEWER, STEAM AND CONDENSATE AND ELECTRICITY) TO THIS FACILITY WILL BE DESIGNED AND INSTALLED BY DOYON UTILITIES (DU) UP TO THE DEMARCATION POINTS.

POINTS OF DEMARCATION (POD) ARE AS FOLLOWS:
– WATER: POD IS THE DISTRIBUTION SIDE OF THE FIRST VALVE AFTER THE METER. WHERE DU PROVIDES FOR FIRE SERVICE LINES COMBINED WITH BUILDING SERVICE WATER LINES, THE POD FOR THE FIRE SERVICE IS THE DOWNSTREAM SIDE OF THE FIRST COUPLING AFTER THE FIRE SERVICE LINE SPLITS FROM THE WATER SERVICE LINE INSIDE THE FACILITY; THE POD FOR THE WATER SERVICE LINE REMAINS AT THE DISTRIBUTION SIDE OF THE FIRST VALVE AFTER THE FIRST METER.
– SEWER: POD IS UPSTREAM OF THE FIRST CLEANOUT OUTSIDE THE BUILDING. THE CONTRACTOR SHALL PROVIDE THE CLEANOUT UNLESS DU AND THE GOVERNMENT DETERMINE A CLEANOUT IS NOT NEEDED, IN WHICH CASE THE POD IS WHERE THE SERVICE LINE EXITS THE STRUCTURE. SEE MECHANICAL FOR LOCATION OF CLEANOUT.
– STEAM: POD IS AT THE DISTRIBUTION SIDE OF THE FIRST VALVE AFTER THE METER.
– CONDENSATE: POD IS IMMEDIATELY AFTER THE GATE VALVE (OR CHECK VALVE IF NO GATE VALVES ARE PRESENT) DOWNSTREAM FROM THE FACILITY'S CONDENSATE PUMPS.
–POWER TO FACILITY: A METER AND DISCONNECTING MEANS WILL BE PROVIDED AND INSTALLED BY DU ON THE EXTERIOR OF THE STRUCTURE. THE LOAD SIDE OF THE DISCONNECTING MEANS IS THE POD FOR ELECTRICAL POWER.

3. PROVIDE 30 POV PARKING SPACES. SEE SHEET C2.02 FOR NEW PARKING AREA REQUIREMENTS.

4. PROTECT EXISTING MONITORING WELLS TO REMAIN ON SITE. MONITORING WELLS THAT HAVE BEEN DAMAGED DURING THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE GOVERNMENT.

5. PROVIDE A BICYCLE RACK. BICYCLE RACK SHALL BE A RIBBON TYPE TUBULAR ALUMINUM WITH AN ANODIZED DARK BRONZE FINISH RIBBON RACK, INC., OR APPROVED EQUAL SEE SHEET C4.03 FOR DETAIL. 2

6. PROVIDE SECURITY FENCING FROM THE NORTHWEST CORNER OF THE ENCLOSED OUTSIDE PARTS STORAGE AREA FENCE LINE TO EDGE OF CONCRETE APRON; CONNECT TO FENCE TO BE INSTALLED UNDER FTW336D IF IT IS IN PLACE WHEN FENCE IN THIS CONTRACT IS INSTALLED. PROVIDE SECURITY FENCING FROM A POINT 6-INCHES OFF THE NORTHWEST CORNER OF BUILDING 2077 (HANGAR 7 & 8) TO THE SOUTHEAST CORNER OF THE ENCLOSED OUTSIDE PARTS STORAGE AREA FENCE LINE. BUILDING 2077 SHOWN ON THIS SHEET AND ON SHEET C2.01 IS ONLY APPROXIMATE. EXACT LOCATION OF THE FENCE IN THIS AREA WILL BE FIELD VERIFIED AND COORDINATED WITH CONTRACTING OFFICER; COORDINATES, DIMENSIONS, PROVIDED ARE ONLY APPROXIMATE.

7. BUILDINGS 2097, 2079, 2077 AND 2080 WILL REMAIN OPERATIONAL DURING THE CONSTRUCTION OF THE AIRCRAFT PARTS STORAGE BUILDING, PARKING AREA AND ACCESS ROAD. THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTING OFFICER TO ESTABLISH ENTRY/EXIT INTO PROJECT SITES; TEMPORARY CONSTRUCTION BARRICADES; ETC.

8. THE CONTRACTOR SHALL PROVIDE A DROP DOWN VEHICLE GATE AT THE ACCESS ROAD OFF OF MONTGOMERY ROAD. THE VEHICLE GATE WILL BE DSC7000 DELTA SCIENTIFIC GATE OR EQUAL. THE VEHICLE GATE SHALL BE A DS (DIPLOMATIC SECURITY) CERTIFIED ANTI-RAM VEHICLE BARRIER. VEHICLE GATE SHALL BE INSTALL PER MANUFACTURER'S RECOMMENDATION. PROVIDE BOULDERS ON EACH SIDE OF THE VEHICLE GATE; SEE SHEET L1.01 FOR BOULDER DETAIL.

9. TOPSOIL AND SEED ALL DISTURBED AREAS.

10. LIMITS OF PROJECT WERE CHANGED TO REFLECT THE ADDITION OF THE 336A DOYON UTILITIES PROJECT, CONTRACT NOS j101395, j101396 & j101397.

AWARD

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY STATE
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym.	Action	Description	Date	Appr.
2	R0002	CHANGED NOTE 5.	11/10/09	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

Designed: MED
Drawn: WISD.
Reviewed: T. Lubeck
Submitted: D. Frenier
Date: 01 FEBRUARY 2010
Dwg Scale: AS NOTED
Plot Scale: 1:2
File: FTW336A-008-C1-01
Drawing #: F-211-13-01

INV. NO. W911KB-10-C-0007
PN 65076
FTW336A

FT. WAINWRIGHT, ALASKA
AIRCRAFT PARTS STORAGE
CIVIL
PLANS
OVERALL SITE PLAN

Reference number:
C1.01
Sheet 8 of 120