Minor
OPERATION AND MAINTENANCE
Activity Plan

SPD Installation of Data Lines and Electrical Lines for Building 105-28K
Site Evaluation Areas 191 and 476

Prepared by: MARIE BERRY (Affiliate) Digitally signed by MARIE BERRY (Affiliate) Date: 2024.05.14 14:17:36 -04'00'
Marie Berry, Environmental Compliance Authority, NCP Date

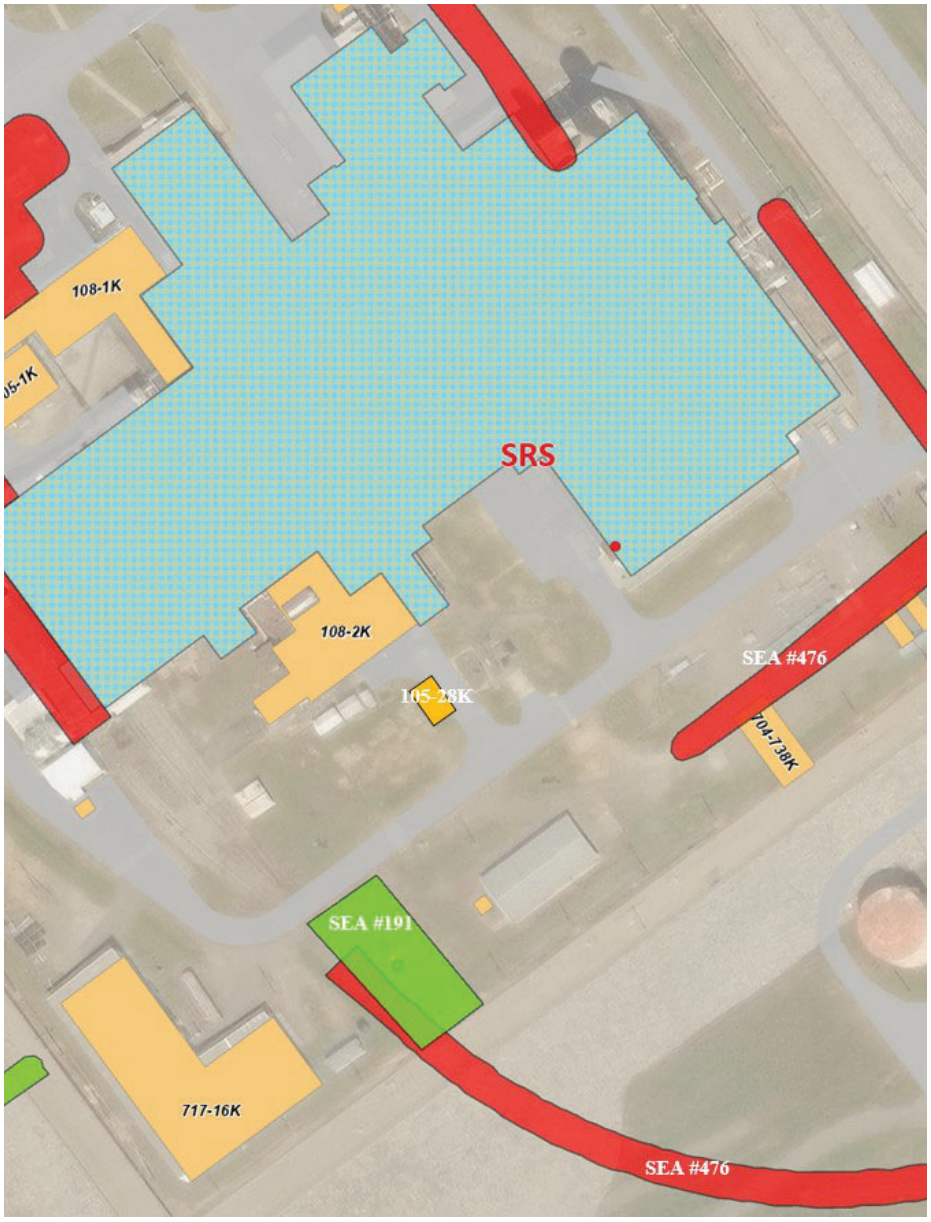
Approved by: DEREK COLLIGAN (Affiliate) Digitally signed by DEREK COLLIGAN (Affiliate) Date: 2024.05.19 15:54:27 -04'00'
Derek Colligan, Radiation Protection Manager, KAC Date

Approved by: TIMOTHY SPIEKER (Affiliate) Digitally signed by TIMOTHY SPIEKER (Affiliate) Date: 2024.05.20 09:38:39 -04'00'
Tim Spieker, SPD Phase CD-3 Project Manager Date

1. INTRODUCITON

This Operation and Maintenance (O&M) Plan for the SPD Installation of Data Lines and Electrical Lines to Building 105-28K will provide a means by which soil/media disturbance can commence within Site Evaluation Areas (SEA) 191 and 476 (Figure 1), while protecting human health and the environment, and minimizing impacts to long term characterization and remediation efforts. This O&M Plan is characterized as "minor intrusive" because less than 10 percent of the Site Evaluation Area will be excavated/disturbed.

Figure 1: Location of Site Evaluation Areas 191 and 476



The work activity include:

- Excavating trench from west side of building 704-738K to existing pole K2008A
- Excavating trench from north side of building 704-738K to south end existing duct bank crossing under the road to 105-K
- Excavating trench on the north side of the road to 105-K to existing pole K2008C
- Excavating trench from existing pole K2007A to new Access Control Building 105-28K. Will cross the road south of 105-K.

Attachment 1 depicts the excavation areas for the cable/conduit that will be installed above ground and underground. The work is to occur within the K-08 Outfall drainage (Attachment 2).

2. AREA DESCRIPTION AND CONDITIONS

Both Site Evaluation Area 191 and 476 are identified as requiring radiological evaluation due to the presence of moderator/radioactive impurities from spills associated with rail transport of cask cars contain filters, deionizers, etc. Purification Area along the K-Area railroad (RR) system. This SEA disturbance exists within K-Area Complex (KAC) in the vicinity between the deactivated Powerhouse and Building 163-71K. This minor excavation is required to create a trench to install data and electrical lines to Building 105-28K.
Evaluation Area 476 is identified within the Federal Facility Agreement with the Environmental Protection Agency because of the potential release/migration of radiological materials from the RR tracks.

As noted, the potential contaminants of concern are radionuclides, chiefly as fission products and tritium from heavy water/D2O moderated reactor operations. Safety and health concerns are primarily from personnel exposure to radionuclides. Previous work associated with this Site Evaluation Area, and for those similar within K-Area, has not yielded any evidence of radionuclide presence in the environment.

3. O&M ACTIVITY

A. <u>O&M Activity Description</u>

The planned soil disturbing activity in the buffer zones of SEA 476 and 191 involves minor excavation to create a trench to install data and electrical lines to Building 105-28K.

This activity is expected to begin in May of 2024 and complete by December 2024. If this work scope requires significant change for any reason, the SRNS

On-Scene Coordinator (OSC) will be contacted to determine if modifications to this O & M Plan are required.

B. O&M Activity Sampling and Monitoring for Health and Safety

It is anticipated that Radiological Protection (RP) will perform sampling to support the trench excavation to install the data and electrical lines. There should be no waste associated with this activity. However, if soils contaminated by radionuclides are discovered, waste disposition will be performed typical for SRS waste protocol. Given that the soil from the buffer area for SEA 476 is found to be at or below background for radiological constituents, RP will allow for the excavation as described in Section D to proceed.

The work area will be barricaded to ensure that access is controlled. This is personnel safety issue.

Worker health and safety will be described and controlled, as required, in the Work Package and Assisted Hazards Analysis.

C. Health and Safety Plan

The health and safety concern for this O & M Plan primarily involves worker exposure to potential radiological contamination. While there has been no detectible radiological contamination (above background) found in recent soil disturbances in K-Area, RP shall be available for any questions or oversight requested during the excavation process.

D. Characterization and Sampling Plan for the Affected Area within SEA 476

Soil sampling is required for any soil disturbance in this Site Evaluation Area. The soil sampling scope is defined in the *Soil Sampling Plan for Work Order #2081770-04 – Installation of power and data for SPD Control Access Building 105-28K* (Ref. 2). The characterization and sampling record for this minor intrusive O&M activity will be the RP sample data for the presence of radiological contamination in the soil/media.

If any radioactive contamination is found from sampling, the NCP Environmental Compliance Authority (ECA), along with RP and SPD Project Management, will devise an alternative plan by which to carry out pole placement (options may consider the removal of the contamination, provide for new pole locations, etc.). As indicated above, evidence of soil contamination would likely require revision to this O & M Plan, or a possible addendum.

Additionally, the SRNS-OSC shall be notified by the NCP ECA, and any additional work scope and sampling from the soil disturbance areas will be completed per SRNS-OSC guidance.

E. Contaminated Materials Management and/or Disposal

The disposition of any waste materials generated during this activity will be contingent upon sample results. If SEA 476 soil/media are determined to be "clean," normal waste disposal practices may be applied, as determined by SPD ECA. If contaminated, however, RP will advise soils/media/equipment disposition, in coordination with K-Area Waste Certification Engineering and the ECA. These options would be explored and fully described in a revised O&M Plan (or addendum).

Contaminated waste should be characterized and disposed of as "Radioactive Waste" under current SRNS/KAC Waste Management procedures, or deconned, if deemed appropriate by RP and the SRNS-OSC.

F. Environmental Plans and Permit Modification Requests

The soil disturbing aspect of this task is not expected to involve environmental plans/permits or other required maintenance and inspections, except for potential erosion control practices.

The Site Use/Site Clearance Permit (Ref. 3) process has been completed for this activity.

4. CONTINGENCY PLAN

If at any time during the implementation of the activity, the conditions change, such that the activity is no longer considered "minor" (is greater than 10% of a waste unit area impacted or disturbed) or any other unanticipated event occurs, the Facility Operations Manager or the ECA shall:

- Immediately notify the SRNS-OSC. The SRNS-OSC will notify the DOE-OSC.

- Contain and stabilize the area, investigate as necessary to determine the necessary change in the activity plan, secure the area and stop work.

- Update the SRNS-OSC as to the findings and the requested path forward. The SRNS-OSC will communicate the information to the DOE-OSC and obtain concurrence on the path forward.

5. DOCUMENTATION & REPORTING

The SPD Phase 3 Project Manager or the SPD ECA will transmit the following close-out documentation to the SRNS-OSC by the 20th day of the month following the month that the land disturbing activity was completed:

- the signed O&M Plan,
- any sampling and characterization data collected,
- quantity of contaminated materials generated, and
- treatment, storage, and disposal location of contaminated material.

6. REFERENCES

1. WSRC-RP-96-45, Savannah River Site Plan for Performing Maintenance in Federal Facility Agreement Area (O&M) Plan (U), December 15, 1996.

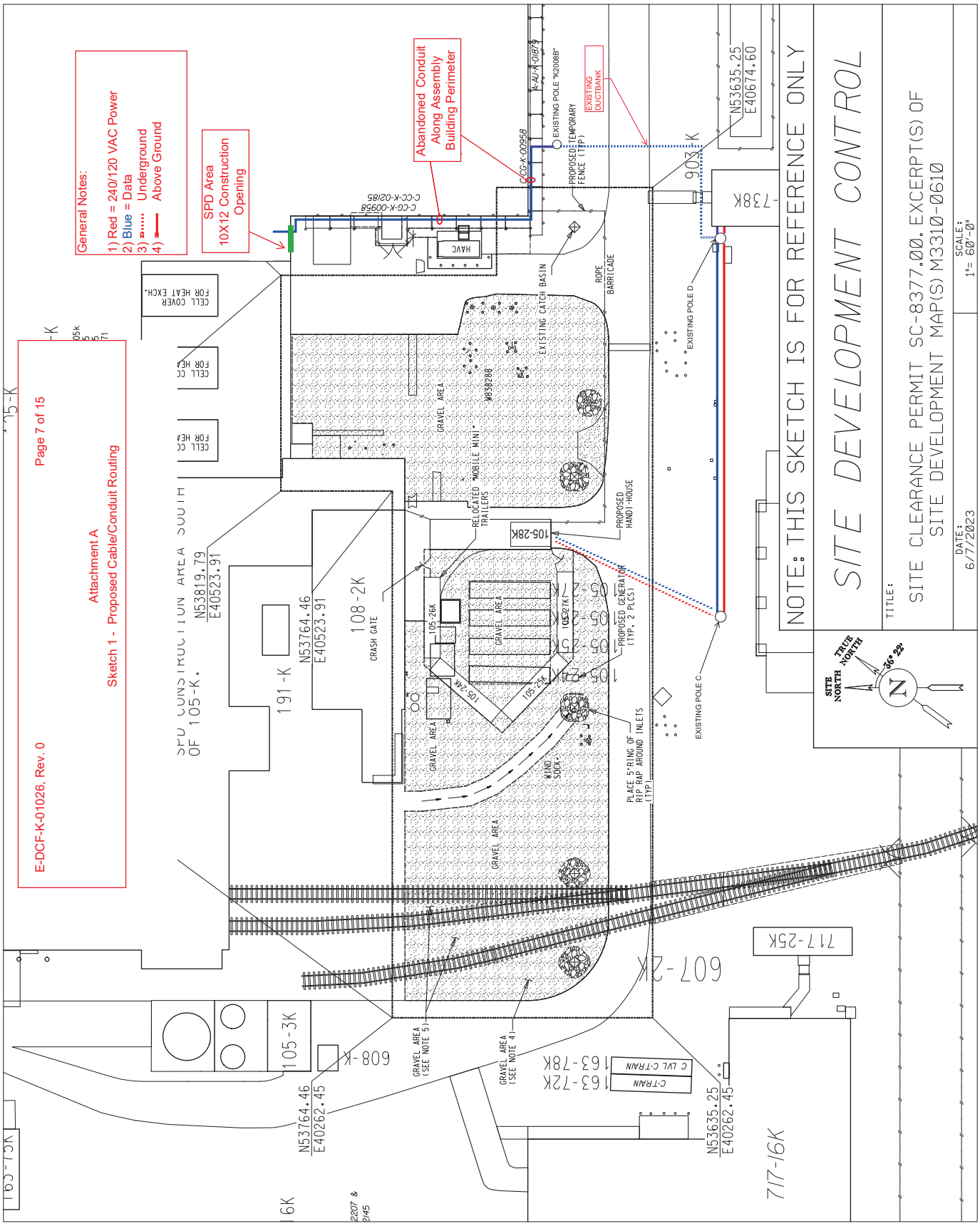
2. Soil Sampling Plan for Work Order #2081770-04 – Installation of power and data for SPD Control Access Building 105-28K, May 2024.

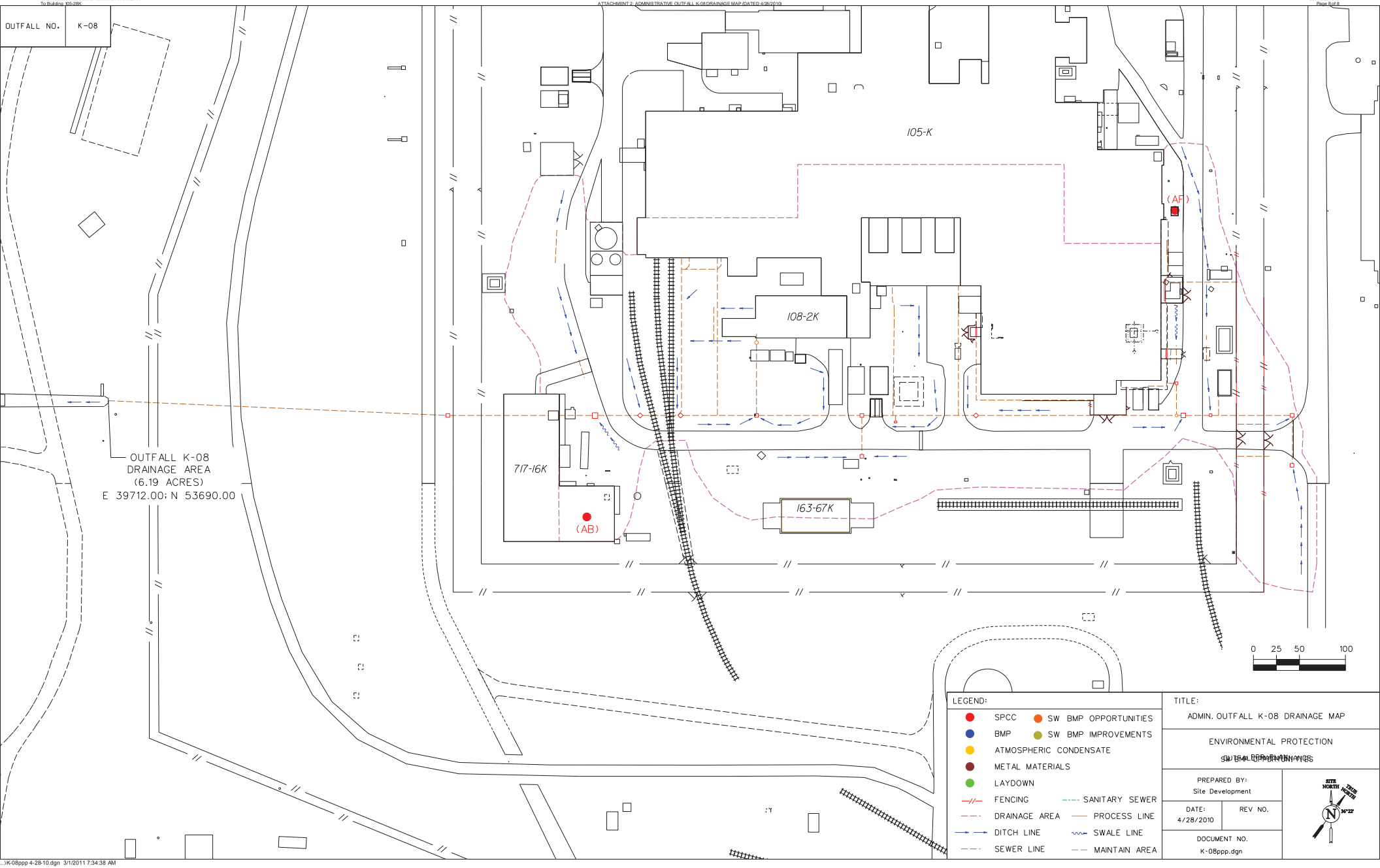
3. Approved Site Clearance Request SC-8377.01 – Site Clearance Request to Revise SC-8377.00 To Install Above and Underground Power from 704-38K To Access Building Structure #(105-28K). Installation of Number of Poles and Exact Location of Poles (TBD). Located West of 704-738K, January 2024.

7. ATTACHMENT

1. Cable/Conduit Routing for Power and Data Lines for 105-28K

2. Administrative Outfall K-08 Drainage Map (Dated 4/28/2010)


General Notes:
1) Red = 240/120 VAC Power
2) Blue = Data
3) Underground
4) Above Ground
SPD Area
10X12 Construction
Opening
Abandoned Conduit
Along Assembly
Building Perimeter
E-DCF-K-01026, Rev. 0
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Attachment A
Sketch 1 - Proposed Cable/Conduit Routing
NOTE: THIS SKETCH IS FOR REFERENCE ONLY
SITE DEVELOPMENT CONTROL
SITE CLEARANCE PERMIT SC-8377.00. EXCERPT(S) OF
SITE DEVELOPMENT MAP(S) M3310-0610
DATE: 6/7/2023
SCALE: 1"= 60'-0"
TRUE NORTH
SITE NORTH
36° 22'
105-28K
105-3K
108-2K
191-K
717-25K
717-16K
607-2K
809-K
163-78K
163-72K
738K
903-K
GRAVEL AREA
CRASH GATE
HAVC
EXISTING CATCH BASIN
ROPE BARRICADE
EXISTING POLE D
EXISTING POLE C
PROPOSED HANDI-HOUSE
PROPOSED GENERATOR (TYP. 2 PLCS)
PLACE 5' RING OF RIP RAP AROUND INLETS (TYP.)
RELOCATED "MOBILE MINI" TRAILERS
WIND SOCK
PROPOSED TEMPORARY FENCE (TYP.)
EXISTING DUCTBANK
EXISTING POLE "K2008B"
GRAVEL AREA (SEE NOTE 5)
GRAVEL AREA (SEE NOTE 4)
C-TRAIN
C LVL C-TRAIN
N53819.79
E40523.91
N53764.46
E40523.91
N53764.46
E40262.45
N53635.25
E40262.45
N53635.25
E40674.60


OUTFALL NO. K-08
105-K
108-2K
717-16K
163-67K
(AF)
(AB)
OUTFALL K-08
DRAINAGE AREA
(6.19 ACRES)
E 39712.00; N 53690.00
0 25 50 100
LEGEND:
SPCC
BMP
ATMOSPHERIC CONDENSATE
METAL MATERIALS
LAYDOWN
FENCING
DRAINAGE AREA
DITCH LINE
SEWER LINE
SW BMP OPPORTUNITIES
SW BMP IMPROVEMENTS
SANITARY SEWER
PROCESS LINE
SWALE LINE
MAINTAIN AREA
TITLE:
ADMIN. OUTFALL K-08 DRAINAGE MAP
ENVIRONMENTAL PROTECTION
OUTFALL DRAINAGE
SW BMP OPPORTUNITIES
PREPARED BY:
Site Development
DATE:
4/28/2010
REV NO.
DOCUMENT NO.
K-08ppp.dgn
SITE NORTH
TRUE NORTH
30°22'