Department of Energy
Oak Ridge Operations
Weldon Spring Site
Remedial Action Project Office
Route 2, Highway 94 South
St. Charles, Missouri 63303

September 03, 1987

Ms. Katherine Biggs
United States Environmental
Protection Agency, Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101

Dear Ms. Biggs:

Enclosed is the information regarding the removal of abandoned power lines and poles from the Weldon Spring Site, which we discussed in our telephone conference on July 24, 1987.

The site contains about 150,000 linear feet of electrical and communications wire and cable and 300 timber utility poles. Many of these poles are rotten and several have fallen during the past year. They present a safety hazard to site personnel.

We propose to remove the lines and poles. These will be disposed of off site. However, any radiologically contaminated material will be retained on site as described in the enclosed material. The work will be accomplished by a subcontractor to MK-Ferguson Company, our Project Management Contractor.

The enclosed index lists five (5) attachments including sampling information and drawings and specifications. If you have any questions please contact Jim Coyne of PEER Consultants, our support services contractor at (314) 441-8472.

Sincerely,

R. R. Nelson

R. R. Nelson
Project Manager
Weldon Spring Site
Remedial Action Project

Enclosure:
As stated

cc: Dave Bedan, MDNR

DOCUMENT NUMBER: I-600-601-1.01

LIST OF ATTACHMENTS

Attachment 1

- Interim Measure - Electrical Line and Pole Removal - Summary

Attachment 2

- Specifications for Electric Power and Pole Removal

Attachment 3

- Special Conditions - Electrical Power and Pole Removal

Attachment 4

- Drawings - Chemical Plant Electrical Lines and Pole Removal

Attachment 5

- Radiological Survey of Chemical Plant Electrical Poles

Note - See also Addendum No. 1 dated 8/27/87

FILE NUMBER

INTERIM MEASURE

ELECTRICAL LINE AND POLE REMOVAL

SUMMARY

This task consists of removing abandoned power line and support poles at the Weldon Spring Site. About 300 timber utility poles and 150,000 lf of electrical and communications cable and wire are involved.

We propose to do this work now to improve safety conditions at the site. Many poles are rotted at ground level and pose a potential hazard to personnel working in the chemical plant area. In fact, a number of poles have failed and fallen during the past year.

Surveys of utility poles (see Attachment No. 5) show levels of contamination, where present, to be well within limits acceptable for release of these materials from the site. The plan (see Attachment No. 2) calls for survey of the poles and lines to verify they are uncontaminated immediately prior to release. Any poles found contaminated will be segregated and stored for later disposal. We expect these materials to be releasable. Should we find during removal that a pole or section thereof is contaminated above release levels we plan to leave that pole or portion thereof in place until we have constructed a suitable on-site interim storage area. Contamination, if present, is expected to occur at or near ground level on the poles. Thus, cutting those poles off above ground level would alleviate the immediate safety hazard. The butt end could remain in-situ for later removal.

MORRISON-KNUDSEN ENGINEERS, INC.
A MORRISON KNUDSEN COMPANY

SET I.D. _____

WSSRA PROJECT REVIEWS AND APPROVALS

Subject: WSSRA PROJECT - CP
Specification Section 02053
Demolition of Electrical Line and Poles

5121-C:SP-S-01-0190-~~02~~ 03 ~~BLG~~
(DOCUMENT NO.)

	Signature	Date
Prepared:	J Eanes	8-21-87
Reviewed:	DW Reppond	8-21-87

Approved, MKE:		
- Lead Design Engineer	DW Reppond	8-21-87
- Design Manager	J. L. Jordan	21 Aug 87
- Vice President, ESci Division		

QA Compliance _____

Approved:		
- PMC Engineering Manager	DK Lewis	9/28/87

Q.A. REVIEW
ENTRY NO. N/A
INIT. [illegible] DATE 11/30/87

FILE NUMBER: _____

4549G/0137G

02/87

SECTION 02053

DEMOLITION OF ELECTRICAL LINES AND POLES

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. This Section describes the requirements for the removal of existing timber poles, and above-ground electrical, power, and communications lines at a uranium feed materials processing plant as located on the Subcontract Drawings. | 3

B. Transformers and substations will be removed by others.

1.2 DEFINITIONS

Utility: For the purpose of this Section, above ground utility means any service such as electric power systems, lighting systems, telephone, and associated support structures.

1.3 JOBSITE CONDITONS

See Special Conditions for restrictions applicable to work in areas of potential radiation hazard. | 3

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.1 GENERAL

A. Removal of the utility shall not be undertaken until written approval for such work has been obtained from the Contractor.

FILE NUMBER

Q.A. REVIEW
ENTRY NO. N/A
INIT. DATE 8/3/87

B. Except for the utility lines shown to remain, all on-site above-ground electric power, lighting, and communication lines shall be removed, together with all poles and supporting structures. Conduit and cable risers on poles shall be cut off at ground level. Poles, grounding rods and guy wire anchors shall be pulled and the voids filled to the ground surface with tamped earth. Acceptable back-fill material is available on site. Relocation of lines, if required, will be performed by others.

C. To assure uninterrupted service to off-site customers, the Subcontractor shall obtain approval from the affected utility companies before disturbing utilities. Utilities shall be protected from damage by demolition operations until they are removed from service.

D. Although Contractor intends to de-energize all wire to be removed, Subcontractor shall verify that all electrical items within Subcontractor's Scope of Work are de-energized prior to commencing work.

E. Backfilled holes and unpaved areas disturbed by demolition operations shall be seeded as specified in Section 02930.

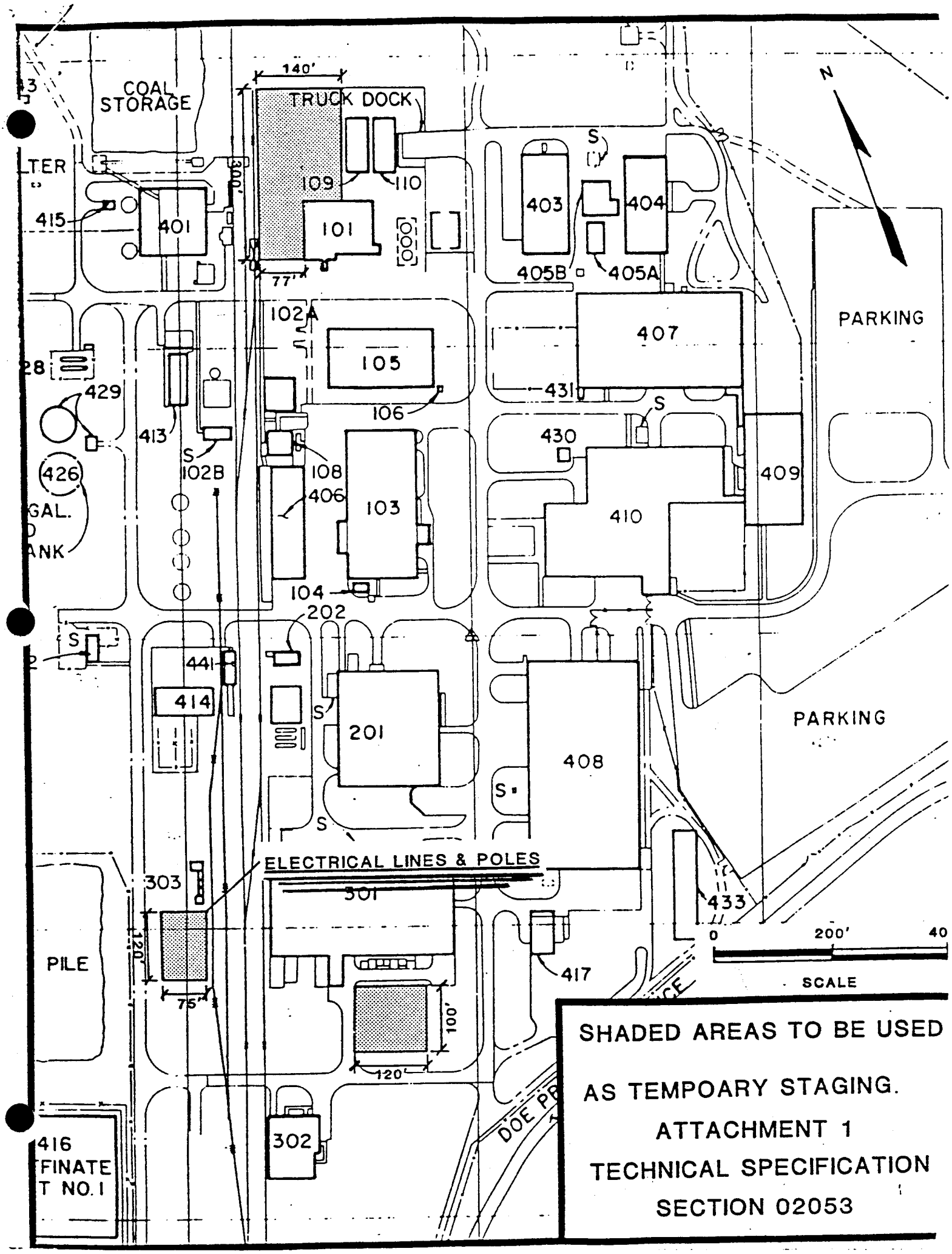
3.2 DISPOSAL OF DEMOLITION DEBRIS

A. All materials will be subject to classification by the Contractor. The materials will be classified as contaminated and uncontaminated. No contaminated material is expected; however, any contaminated material, if encountered and so classified, shall be stacked in the on-site storage area shown on Figure 02053-1. Uncontaminated material shall be disposed of off-site. 3

B. After a pole is pulled, the lower part of the pole shall be further checked and classified with regard to contamination. Where a pole is removed from a location where the soil is found to be contaminated, the pole shall be cut off two feet above ground contact level. 3

END OF SECTION 02053

FILE NUMBER: _____



SHADED AREAS TO BE USED

AS TEMPOARY STAGING.

ATTACHMENT 1

TECHNICAL SPECIFICATION

SECTION 02053

MORRISON-KNUDSEN ENGINEERS, INC.
A MORRISON-KNUDSEN COMPANY

SET I.D. _____

WSSRA PROJECT REVIEWS AND APPROVALS

Subject: WSSRA PROJECT - CP
Specification Section 02930
Seeding

5121-C:SP-S-01-0306-00
(DOCUMENT NO.)

	Signature	Date
Prepared:	DW Reppond	4/3/87
Reviewed:	[illegible]	4/3/87

Approved, MKE:		
- Site Design Engineer	DW Reppond	4-3-87
- Engineering & Design Manager	Philip R. Thuener	4-3-87
- Chief Engineer, ESC Division	[illegible]	8 April 87

QA Compliance [illegible] 4/6/87

- PMC Engineering Manager	[illegible]	7/24/87

Q.A. REVIEW
ENTRY NO. N/A
INIT. [illegible] DATE 7/27/87

FILE NUMBER

4549G

10/86

SECTION 02930

SEEDING

PART 1 - GENERAL

1.1 SCOPE

A. This Specification Section describes the requirements for seeding of areas disturbed by demolition operations.

B. The following areas shall be seeded as specified herein: areas where poles, yard structures, and foundation of any description have been removed, all backfilled areas, and all areas disturbed by demolition operations; except that surfaced areas and solid rock shall not be seeded.

PART 2 - PRODUCTS

2.1 SEED

A. All seed shall comply with the requirements of the Missouri Seed Law. Minimum purity shall be 90 percent. Minimum germination including hard seed shall be 80 percent. Maximum weed seed shall be 1.0 percent.

B. The seed mixture from August 1 through April 15 shall be Annual Rye Grass - 10 lb/acre; Orchard Grass - 2 lb/acre; Lespedeza - 5 lb/acre; and Switch Grass - 3 lb/acre.

C. The seed mixture from April 16 through July 31 shall be Big Blue Stem - 10 lb/acre; Indian Grass - 10 lb/acre; and Little Blue Stem - 10 lb/acre.

2.2 FERTILIZER

Fertilizer shall contain equal percentages of nitrogen, phosphorous, and potash, applied at a rate of 65 pounds of each ingredient per acre.

FILE NUMBER: _____

Q.A. REVIEW
ENTRY NO. N/A
INIT. [illegible] DATE 11/30/87

2.3 MULCH

Mulch shall be the cereal straw from stalks of oats, rye, wheat, or barley. The straw shall be clean and bright, relatively free of foreign material, and be dry enough to spread properly. If the above straw specifications cannot be met practicably, the foliage of the following plants may, with the Contractor's approval, be substituted: smooth brome, timothy, orchard grass, reed canary grass, red top, millet, blue stem, indian grass, alfalfa, birdsfoot trefoil, and vetch. The foliage shall be taken from areas of relatively pure stands of plants of the current season's growth.

PART 3 - EXECUTION

3.1 GENERAL

A. The seedbed shall be prepared and fertilized and shall be in a firm but uncompacted condition with a relatively fine texture at the time of seeding.

B. Seeding shall be done before the proposed seedbed becomes eroded, crusted over, or dried out and shall not be done when the ground is in a frozen condition or covered with snow.

3.2 HYDRAULIC SEEDING AND FERTILIZING

A. In lieu of mechanical application of seed and fertilizer, hydraulic application may be used. On slopes steeper than 2:1, or when seeding is applied to a previously seeded and mulched area, seed and fertilizer may be applied hydraulically in a single operation and incorporation into the soil will not be required. On all other slopes, seed and fertilizer may be applied hydraulically provided the seed and fertilizer are applied separately. The seed and fertilizer shall be incorporated into the soil as specified under mechanical seed application.

B. Seed and fertilizer, separately or in combination, shall be mixed with water and constantly agitated so that a uniform mixture can be applied hydraulically to the specified areas. The ratio of seed and fertilizer to water shall be calculated by determining the number of square feet covered by a given quantity of water. Seed shall not be added to the water more than 4 hours before application.

FILE NUMBER: _____

3.3 DRY SEEDING

Dry seeding shall be done mechanically with equipment designed for even distribution of dry seed. The equipment may either be hand operated, such as knapsack seeder, or be tractor-drawn, such as seed drill, except that tractor-drawn equipment will not be permitted on a previously seeded and mulched area. Seed scattered on the surface shall be covered with approximately 1/4 inch of soil by raking or other approved methods except that raking will not be required when seeding a previously seeded and mulched area. Seed placed in the soil shall be approximately 1/4 inch below the surface. After completing the seeding operation, the contractor shall firm the area by rolling, if in the judgment of the Contractor the seedbed is either too loose or contains clods which would reduce the germination of the seed. When rolling is required, a lawn-type roller shall be used and care shall be taken to avoid over-compacting the soil.

3.4 MULCHING

Mulch shall be applied after seeding at the rate of 2 tons per acre.

END OF SECTION 02930

MK-FERGUSON COMPANY
A MORRISON KNUDSEN COMPANY

SPECIAL CONDITIONS

SUBCONTRACT NO. 3589-SC-WP018

ELECTRICAL POWER AND POLE REMOVAL

MK-FERGUSON COMPANY

WELDON SPRING REMEDIAL ACTION PROJECT

ST. CHARLES, MISSOURI

Dated: 07-28-87

3589-SC-WP018

SPECIAL CONDITIONS

MK-FERGUSON CONSTRUCTION SUBCONTRACTS

TABLE OF CONTENTS

SECTION	TITLE	PAGE
SC-1	WORK TO BE ACCOMPLISHED	3
SC-2	DEFINITIONS	3
SC-3	LOCATION	3
SC-4	HOLIDAYS	3
SC-5	SECURITY REQUIREMENTS	4
SC-6	TEMPORARY UTILITIES	4
SC-7	CONSTRUCTION RESTRAINTS	5
SC-8	TEMPORARY STORAGE OF CONSTRUCTION MATERIAL	5
SC-9	CLEANUP AND WASTE DISPOSAL	5
SC-10	CONSTRUCTION HEALTH AND SAFETY	6
SC-11	HEALTH PHYSICS	7
SC-12	TEMPORARY HEAT AND COLD WEATHER ENCLOSURES	10
SC-13	PARKING FACILITIES	10
SC-14	EATING FACILITIES	10
SC-15	DAILY CONSTRUCTION REPORT	10
SC-16	INSURANCE	11
SC-17	QUALITY ASSURANCE	13
SC-18	RESERVED	13
SC-19	SUPERINTENDENCE BY SUBCONTRACTOR	13
SC-20	DISPOSITION OF REMOVED EQUIPMENT, MATERIAL, AND SCRAP METAL	13

TABLE OF COMMENTS

SECTION	TITLE	PAGE
SC-21	SCHEDULE/SCHEDULE OF VALUES	14
SC-22	DISPOSITION OF EXCESS SOIL	14
SC-23	TRAINING AND INDUSTRIAL HYGIENE	15

SC-1 WORK TO BE ACCOMPLISHED

The work scope consists of furnishing all labor, supervision, equipment and materials (except as otherwise specified), and performing all work in strict accordance with Federal, State and Local laws, codes and regulations. The work in general consists of:

Removal of all overhead wiring (power, telephone, etc.) from the site yard areas outside of the building. Poles are to be removed, cut and placed with rolled wire in an area designated on site.

The above description of work is for general information only and in no way limits the responsibility of the Subcontractor for constructing the Work in strict accordance with the subcontract drawings and specifications.

SC-2 DEFINITIONS

See GP2 For General Definitions

SC-3 LOCATION

The work to be accomplished is located at the abandoned Uranium Feed Materials Processing Plant at Weldon Spring, Missouri.

SC-4 HOLIDAYS

The following will be observed as holidays by the Contractor:

* Christmas Day
  Columbus Day
* New Year's Day
  Presidents' Day
  Memorial Day
* Independence Day
  Labor Day
  Thanksgiving Day
  Day Following Thanksgiving

* Holidays occurring on Saturday or Sunday will be on Friday or Monday.

Upon written notice from the Subcontractor 5 days in advance, the Contractor will adequately man the job on Contractor holidays not observed by the Subcontractor.

SC-5 SECURITY REQUIREMENTS

A. Access

1. Access to the site is via the main gate on Highway 94 South. The gate is normally open from 7 a.m. to 6 p.m. and the normal work day is from is 8 a.m. to 4:30 p.m., Monday thru Friday.
2. Special controls are established at the Weldon Spring site to govern personnel access. A guard station is located approximately 50 feet inside the main gate.
3. All privately and Subcontractor owned vehicles shall stop at the guard station.
4. The Subcontractor will have a specific identification symbol prominently displayed on each vehicle for entry to the site. A sample of this symbol will be given to MK-F prior to starting work.
5. If no specific identification symbol is displayed on a vehicle, each person shall sign in and out with the guard before entry to the site.

SC-6 TEMPORARY UTILITIES

A. Telephone Service

Telephone service will not be provided by the Contractor. The Subcontractor shall make his own arrangements for any telephone service desired.

B. Electrical Power for Construction

Electrical power for construction will not be provided by the Contractor. The Subcontrac tor shall make his own arrangements for construction power.

C. Toilet and Washroom Facilities

Toilet and washroom facilities shall be provided by the Contractor. Emergency showers are available in Trailer 7 and 8.

D. Temporary Water Facilities

1. Drinking water shall be furnished by the Subcontractor.

2. If authorized by the Contractor, temporary supply lines, standpipes, and connections over and above those facilities presently existing and available shall be furnished and installed by the Subcontractor and shall be removed upon the completion of the need for such temporary facilities.

SC-7 CONSTRUCTION RESTRAINTS

There are no known restraints at this time. The Subcontractor should be aware that more than one subcontractor may be working in the areas identified in the Work Scope. These areas are to be used jointly and the Subcontractor shall be responsible to coordinate his work activities with ongoing activities.

SC-8 TEMPORARY STORAGE OF CONSTRUCTION MATERIAL

The Contractor will provide space for storage of materials and equipment during performance of the Work Scope.

The Subcontractor is responsible for the security of his equipment and material.

SC-9 CLEANUP AND WASTE DISPOSAL

A. Cleanup

The Subcontractor shall maintain a neat and orderly work area. Cleanup of the construction work areas shall be required on a daily basis. Waste and debris shall not be allowed to accumulate in such quantities as to create an unsightly appearance, a safety or fire hazard. All construction areas shall be thoroughly cleaned to the satisfaction of the Contractor prior to final acceptance of the completed project(s).

B. Waste Disposal

The Subcontractor shall provide suitable receptacles and dispose of all waste material

such as paper, discarded containers, scrap lumber, scrap metals, etc., by removal from the work area to on-site disposal or storage areas.

SC-10 CONSTRUCTION HEALTH AND SAFETY

A. Contractor Safety Program

1. Subcontractors shall comply with all applicable Local, State, DOE/WSSRAP and Federal Safety Codes, Regulations, Standards and Special Procedures.

   A Subcontractor may submit his own Safety Program to the Contractor for review. The Subcontractor's program must be equal to or more stringent than the WSSRAP Construction Safety and Health Program for acceptance and use. The Subcontractor's Safety and Health Program shall be an integral part of this Subcontract including mandatory implementation and compliance by the Subcontractor.

2. During the Pre-Bid Meeting a copy of the WSSRAP Construction Safety and Health Management Program will be made available for review per request. The successful bidder will be issued a copy with the Notice of Award by the Contractor's Subcontract Administrator. A Table of Contents for the WSSRAP Safety and Health Program is presented on Figure 1.

Figure 1

SAFETY AND HEALTH MANAGEMENT PROGRAM

TABLE OF CONTENTS

SECTION	TITLE	PAGE
	TABLE OF CONTENTS	
	MK-F ACCIDENT PREVENTION POLICY	
	CONSTRUCTION SUBCONTRACTOR SAFETY POLICY	
	REGULATIONS AND STANDARDS	
I	PURPOSE	
II	PMC ORGANIZATION	
III	SUBCONTRACTOR ORGANIZATION	
IV	SCOPE OF RESPONSIBILITIES	
V	INSPECTION & ENFORCEMENT	
VI	AUDITS	
VII	FIRE PREVENTION AND PROTECTION	
VIII	FIRST AID AND MEDICAL PROGRAM	
IX	PMC RECORDS AND REPORTS	
X	SUBCONTRACTOR RECORDS AND REPORTS	
XI	EMERGENCY ACTION	
XII	SAFETY AND HEALTH TRAINING PROGRAM	
XIII	RADIOLOGICAL CONTROL AND MONITORING	
XIV	ENVIRONMENTAL CONTROL AND MONITORING	
XV	ACCESS CONTROL	
XVI	INDUSTRIAL HYGIENE	
XVII	JOB SAFETY ANALYSIS	
XVIII	GENERAL SAFETY AND HEALTH PROCEDURES	
Appendix A	POSTERS, RECORDS AND REPORTING FORMS	
Appendix B	JOB SAFETY ANALYSIS	
Appendix C	PROJECT FORMS AND DISTRIBUTION TABLE	

B. CONSTRUCTION SAFETY & HEALTH INITIAL INDOCTRINATION & TRAINING

1. All Subcontractor personnel working on the site shall receive the basic Construction Safety and Health Initial Indoctrination and Training from the Construction Safety and Health Manager. The Indoctrination will be oral or written and will take 30 minutes. No Subcontractor personnel will be permitted to work without having received this basic indoctrination.

2. Indoctrination requirements will not apply to routine delivery men who will be escorted while on site by Contractor personnel.

C. Smoking, Drinking, Eating and Chewing Restrictions

No smoking will be permitted in the immediate vicinity or any flammable liquids, gases or highly combustible material, or in any plant area posted as a non-smoking area. No smoking, eating or chewing will be permitted in any controlled area.

SC-11 HEALTH PHYSICS

All work performed under this subcontract shall conform to the Construction Safety & Health Management Program-SEC XIII, SEC XIV, SEC XV.

The Subcontract work area is located within a radiologically controlled area. The Contractor will provide formal radiation training (2 hours in duration) and dosimetry requirements of bioassay and TLD prior to commencement of the work.

A. Work Conditions

1. Some areas beyond the control point have special Health Physics restrictions. These are controlled by ribbons, signs, and tags. Such restrictions shall be observed by the Subcontractor and applicable precautions taken.

2. Radiation exposure on this subcontracting effort will be maintained well within allowable radiation exposures.

3. Personnel protection equipment: The level of protection will generally require coveralls, cotton gloves, and rubber boots. These items will be provided by the Contractor.

4. Personnel Monitoring: All personnel will be monitored for radioactive contamination upon leaving radiologi cally controlled area. Personnel will be instructed in self-monitoring procedures if necessary.

5. Vehicles Monitoring: All vehicles, tools, & equipment, used inside a controlled area will be monitored for radioactive contamination by ES&H personnel before leaving the area.

6. ES&H Monitoring: The ES&H personnel will provide radiological surveillance over work activities and advise the Subcontractor on matters concerning radiation safety.

B. Warning Signals: In emergency cases, the Subcontractor may depend on direct verbal information from the Contractor's personnel for warning signals. The Subcontractor's foreman and employees shall take action as directed. The Subcontractor's representative shall obtain the name, position, and agency of the messenger providing such direction.

C. Disposition of Contaminated Equipment, Tools and Material:

1. The Subcontractor shall use his own equipment in performing the required work under this Subcontract. All tools, vehicles, equipment and material will be inspected for radioactive contamination by Contractor personnel prior to removal from the construction area. Site experience has shown that no decontamination problems have occurred.

2. Should the Subcontractor's tools, material, or equipment become

contaminated, they will have to be decontaminated before removal from the area. If decontamination becomes necessary, the Contractor will provide instructions for decontamination which may consist of steam cleaning, dry brushing, or washing with appropriate liquids. Decontamination required beyond these described will be handled under Article 59, "CHANGES" of the General provisions.

3. If decontamination proves impracticable or impossible, the tools, material, or equipment in question will be retained and an equitable adjustment of the value of the equipment for same will be negotiated with the Subcontractor provided that:

   a. There is no fault or negligence of the Subcontractor contributing to the contamination;

   b. The Subcontractor has followed all the specific instructions of the authorized HP personnel who have surveillance over the worker;

   c. Item or equipment confiscated from the Subcontractor is documented by a Confiscation Notice furnished to the Subcontract Administrator by the Contractor and signed by HP personnel and the Operations Manager or his designee.

   d. The Subcontractor allows reasonable time (a maximum of five (5) working days, excluding weekends and holidays) in which to attempt decontamination of the item(s) in question.

4. If reimbursement is required for tools, material or equipment, the following compensation will be made:

   a. Tools valued less than $300.00: 95% of replacement cost.

b. Tools/equipment $300.00 and up: If less than one (1) year old or at top of depreciation schedule, at 75% of replacement cost; if at bottom of or off the depreciation schedule, at 50% of replacement cost.

SC-12 TEMPORARY HEAT AND COLD WEATHER ENCLOSURES

A. Temporary heating if needed shall be conducted in strict accordance with the applicable section of the Construction Safety and Health Management Program. The Subcontractor shall provide all temporary heat and/or heating equipment required for his use. The Subcontractor shall provide a watchman to check the heater when they are in operation and construction crews are not working at the job site. The use of open-type or oilpot salamanders, and gasoline-fueled heaters is prohibited. All products of combustion-type heaters shall be directly vented to the exterior of the structure and/or temporary enclosure.

SC-13 PARKING FACILITIES

A. Construction personnel shall park their vehicles in the designated parking area.

SC-14 EATING FACILITIES

A. No lunch room or cafeteria facilities are available.

SC-15 DAILY REPORT

A. The subcontractor shall submit a daily report to the Operations Department stating the following information:

1. Work Accomplished
2. Manpower
3. Equipment
4. Problems or delays

SC-16 <u>INSURANCE</u> (Reference GP-33)

A. Subcontractor shall procure and maintain, during the period that this order remains in force, insurance coverages and limits of not less than those set forth in this agreement. Subcontractor will require all insurance companies issuing policies of insurance for Subcontractor, to certify to the Contractor in writing prior to commencement of any work, that such policies have been issued and are currently in effect.

Subcontractor agrees to waive any subrogation rights against Contractor.

Policies issued for Subcontractor shall be endorsed to include the following for the benefit of the Contractor.

* A 30 day advance written notice in the event of cancellation, non-renewal or material change of any policy.

* Contractor named as Additional Insured, as interests appear (Coverage B below).

* Subcontractor's insurance is primary and any insurance maintained by Contractor is excess and non-contributory.

* Cross liability or severability of interest clause (liability policies only).

INSURANCE COVERAGES

Type of Coverage: A

Worker's Compensation and, where an exposure exists Federal Employees Liability Act, U.S. Longshoremen & Harbor Workers', Jones Act and Employer's Liability.

Policy Limits:

State and Federal Acts - Statutory
Employer's Liability - $1,000,000

Type of Coverage: B

Comprehensive General Liability including

coverages for Independent Contractors, Products and Completed Operations (extending for at least 24 months after completion of operations) Blanket or Broad Form Contractual, Personal Injury Liability, Broad Form Property Damage, and where an exposure exists and explosion, collapse and underground (XCU) hazard exclusions deleted.

Policy Limits:

$1,000,000 each occurrence Bodily Injury.

$500,000 each occurrence Property Damage: or $1,000,000 Combined Single Limit.

Type of Coverage: C

Comprehensive Automobile Liability including coverage for owned, non-owned and hired vehicles.

Policy Limits:

$500,000 each person/$1,000,000 each occurrence.

Bodily Injury/$500,000 each occurrence Property Damage: Or $1,000,000 Combined Single Limit.

B. In the event any work to be performed under this subcontract is sublet, the Subcontractor will require the same insurance coverage and limits from its lower tier Subcontractors or suppliers and will require said lower tier Subcontractors or suppliers to certify insurance coverage to the Contractor prior to the commencement of any sale or work.

C. If Subcontractor shall fail to certify required insurance coverage to the Contractor as set forth above, before commencing work hereunder the Contractor may, at its option, place insurance of the character, nature and limits described above to cover the operations of the Subcontractor, paying the premiums for same and charging same to the Subcontractor.

D. The Contractor, by requiring the foregoing minimum insurance coverages, will not be deemed to limit any of the other obligations or liabilities of the Subcontractor, deductibles if any, will be solely for the account of the Subcontractor.

E. Should Contractor require additional insurance subsequent to the acceptance of this subcontract by Subcontractor, the net cost thereof shall be an addition to the Subcontract price. Such request must be made in writing to Subcontractor.

F. Notwithstanding any trade practice or custom, neither the Subcontractor nor any lower tier subcontractor or supplier shall be entitled to the benefit of any insurance Contractor or its Customer have in effect of which either might have obtained.

SC-17 QUALITY ASSURANCE

All work performed under this Subcontract shall conform to the requirements of the Contractor's Quality Assurance Program Plan. The Subcontractors work will be subject to inspection and Quality Assurance audits by the Contractor. A copy of the Quality Assurance Program Plan is available upon request from the contractor's office at the Weldon Spring Site.

SC-18 RESERVED

SC-19 SUPERINTENDENCE BY SUBCONTRACTOR

A. SEE GP-46 For General Requirements

B. In accordance with Article GP-46, a full-time working supervisor shall be required.

SC-20 DISPOSITION OF REMOVED EQUIPMENT, MATERIAL, AND SCRAP METAL

All material or equipment removed from any existing system (plant site or quarry), or structure, shall be transported to a storage location as specified by the Construction Engineer, and turned over to MK-F for disposition for the Government.

All potentially reusable material or equipment shall be properly identified, tagged, and checked for contamination before transporting to a storage location identified by the Construction Engineer.

SC-21 SCHEDULE/SCHEDULE OF VALUES

A. SEE GC-6 For General Requirements

B. In General, schedule items should be limited to approximately two (2) weeks duration and limited to approximately ten (10%) percent of the total project value.

SC-22 DISPOSITION OF EXCAVATED SOIL

A. Excess Soil

Soil removed during excavation that is needed for backfill shall be stacked in such a manner as to allow the Contractor and others free and clear access (including road access) to all existing buildings and other operating facilities. In those cases where the stacking of soil near the excavation would restrict vehicle traffic or prohibit access to the buildings and operating facilities, or create congestion of the work area, the Subcontractor shall temporarily stockpile the soil in an area identified by the Construction Engineer away from the excavation until backfill operations are designated. All excess soil removed from excavations (soil displaced in excess of that needed for backfill) shall be disposed of as directed by the Construction Engineer. All soil to be removed to the disposal site shall be free of non-soil materials such as concrete, wood, asphalt, metal, plastic, etc.

B. Radioactively Contaminated Soil

Radioactively contaminated soil will be encountered during excavations required for this Subcontract. Disposal of said soil shall be at the direction of the Construction Engineer.

SC-23 TRAINING AND INDUSTRIAL HYGIENE

A. Training Requirements

1. All personnel who will work in access controlled areas of this site must have undergone a health and safety training program in accordance with 29 CFR 1910.120. This training shall include appropriate respiratory protection training. The training shall be provided by the Subcontractor for its own personnel. Supervisory personnel shall receive additional training in health and safety in accordance with the same regulation.

2. Documentation of completion of this training must be provided to the PMC prior to or upon the arrival of each employee at the site. This documentation must consist of, at a minimum, the dates of training, a description of the contents of the course, a copy of a letter or certificate signed by the person conducting the training course and any additional supporting information which the PMC may deem necessary. Personnel will not be allowed to enter the site until this documentation is received.

3. The Subcontractor shall provide training which addresses the major hazards at the WSS. The Health and Safety Guidebook to the Weldon Spring Site included with this request for proposal presents further details on the known hazards at this site and their locations.

4. Once at the site, personnel shall be briefed by the PMC on the known hazards at this site. This briefing will require approximately four hours per employee during an initial orientation to the site. Locations of WSS hazards will be discussed during this orientation.

B. Medical Surveillance

1. All personnel who work in access controlled areas of the site must be participants in a medical surveillance program. This program must be designed, at a minimum, to detect the effects of exposure to the major hazards listed above.

2. Documentation of the fitness of each employee to work and, where applicable, to wear a respirator at a hazardous waste site or near the major hazards listed above must be received by the PMC upon or prior to the arrival of the employee at the site.

C. Work Conditions

1. The work area in which this contract is to be performed is known to be contaminated with the following materials:

   Asbestos
   Uranium
   Chlorodiphenyls (PCBs)
   Nitroaromatics (TNT, 2,6-DNT, etc.)
   Mercury

   The Subcontractor is responsible for providing adequate equipment and procedures for controlling exposure of its personnel to these materials and for controlling the spread of these materials from its work area to other areas of the site.

2. Known contaminated areas and health hazards are posted by the PMC. Subcontractor personnel shall obey posted warnings.

3. Any health hazard(s) created by the Subcontractor shall be posted by the Subcontractor. The PMC shall be notified immediately of all such hazards.

4. Personal protection or engineering control equipment appropriate to the potential hazards to which personnel performing the work under this subcontract shall be provided by the Subcontractor.

5. Heat stress has been noted at this site due to the warm, humid climate, the personal protective equipment requirements and the prohibition on eating and drinking in certain areas of the site. The Subcontractor is responsible for providing a heat stress management program to its personnel.

6. Biological hazards in the form of poison ivy, snakes, ticks, mosquitoes, and high airborne mold concentrations have been noted at this site.

EE DRAWING NO. 5121E-CP-525
OR GENERAL NOTES, REFERENCE
RAWINGS AND LEGEND.

100 0 100 200
SCALE FEET

MKE DOCUMENT NO. 5121-C : DW-D-01-0115-02

DEPARTMENT OF ENERGY

OAK RIDGE, TENNESSEE

CHEMICAL PLANT
CONSTRUCTION DRAWINGS

PLAN
CTRICAL LINES AND POLE REMOVAL
NORTH (SHEET 1 OF 2)

EF ENG./QA MGR. DATE P.D. Conston S. Smith 5/13/87	PMC ENG'G. MGR. DATE 4/15/87	DOE PROJ. ENG. DATE
N ENGINEERS, INC.	PROJECT NO. DE-AC05-86OR21548	
CA 94105	DRAWING NO. 5121E-CP-524-02	REV. 2

DOCUMENT NUMBER

CP - ELECTRICAL LINES & POLE REMOVAL

MAIN ELECTRICAL LINE FEEDER NUMBER

MKE DOCUMENT NO. 5121 - C : DW - D - 01 - 0116 - 01

S. DEPARTMENT OF ENERGY

OAK RIDGE, TENNESSEE

CHEMICAL PLANT
CONSTRUCTION DRAWINGS

PLAN
ELECTRICAL LINES AND POLE REMOVAL SOUTH (SHEET 2 OF 2)

MKE ENG/OA MGR DATE	PMC ENG'G MGR DATE	DOE PROJ ENG DATE
3/13/87		

BECHTEL ENGINEERS, INC.	PROJECT NO. DE-AC05-86OR21548
	DRAWING NO. 5121E-CP-525-02 REV 2

ELECTRICAL LINES & POLE REMOVAL