

**PLANS AND SPECIFICATIONS FOR
UNDERGROUND STORAGE TANK REMOVAL**

Willow Grove Air Reserve Facility
Willow Grove, Pennsylvania

JUNE 1991

Prepared for

National Guard Bureau
Andrews Air Force Base
Maryland 20331-6008

Submitted by

HAZWRAP Support Contractor Office
Oak Ridge, Tennessee 37831
Operated by
Martin Marietta Energy Systems, Inc.
for the U.S. Department of Energy
under Contract DE-AC05-84OR21400

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SECTION 00120
ACRONYMS AND ABBREVIATIONS

PART 1 - GENERAL

1.01 DESCRIPTION

This section specifies the definition of acronyms and abbreviations used herein.

1.02 ACRONYMS AND ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ANGB	Air National Guard Base
API	American Petroleum Institute
ASTM	American Society for Testing of Materials
BCE	Base Civil Engineer
CFR	Code of Federal Regulations
CO	Contracting Officer
cu. yds	cubic yards
ft	feet
IFB	Invitation for Bids
in.	inch
MOGAS	automotive gasoline
OSHA	Occupational Safety and Health Administration
PADER	Pennsylvania Department of Environmental Resources
PID	photoionization detector
RCRA	Resource Conservation and Recovery Act
SHSO	Site Health and Safety Officer
sq. ft	square feet
USEPA	United States Environmental Protection Agency
UST	underground storage tank

PART 2 - PRODUCTS

Not applicable to this section.

PART 3 - EXECUTION

Not applicable to this section.

*** END OF SECTION 00120 - ACRONYMS AND ABBREVIATIONS ***

SECTION 00300
BID FORMS

Bid Item No.	Description	Unit	Estimated Quantity	Unit Price ⁽¹⁾	Total Bid Item Price ⁽²⁾
1.	Mobilization/Demobilization	Lump sum	--	--	\$ _____
2A.	UST01 and associated piping Cleaning and Removal (including soil excavation)	Lump sum	--	--	\$ _____
2B.	UST02 and associated piping Cleaning and Removal (including soil excavation)	Lump sum	--	--	\$ _____
2C.	Removal of Ventilation, Electric, Air and Water Supply Lines (including soil excavation)	Lump sum	--	--	\$ _____
3.	Additional Contaminated Soil Excavation (Overexcavation)	Cu. yds	--	\$ _____	
4.	Refueling Island Demolition	Lump sum	--	--	\$ _____
5A.	Waste Management UST01 and Associated Piping	Lump sum	--	--	\$ _____
	Soils and Solids				
	- Residual Solid Waste	Cu. yds	190	\$ _____	\$ _____
	- Hazardous Waste	Cu. yds	--	\$ _____	
	Liquids				
	- Nonhazardous Waste	Gallons	1000	\$ _____	\$ _____
	- Hazardous Waste	Gallons	--	\$ _____	
5B.	Waste Management UST02 and Associated Piping	Lump sum	--	--	\$ _____
	Soils and Solids				
	- Residual Solid Waste	Cu. yds	165	\$ _____	\$ _____
	- Hazardous Waste	Cu. yds	--	\$ _____	
	Liquids				
	- Nonhazardous Waste	Gallons	1000	\$ _____	\$ _____
	- Hazardous Waste	Gallons	--	\$ _____	

SECTION 00860
LIST OF DRAWINGS

The following Drawings are provided with this Bid Document and are part of this Contract Document.

<u>Sheet Number</u>	<u>Title</u>
1	Fuel Station Facility Willow Grove Air Reserve Facility Willow Grove, Pennsylvania
2	Fuel Station Facility Site Plan Willow Grove Air Reserve Facility Willow Grove, Pennsylvania

*** END OF SECTION 00860 - LIST OF DRAWINGS ***

SECTION 02610

PART 1 - GENERAL

1.01 DESCRIPTION

This section specifies the requirements for asphalt paving or resurfacing.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. The following specifications refer to the American Association of State Highway and Transportation ~~officials~~ (AASHTO) unless otherwise noted.
- B. Base Course shall consist of 6 in. of crusher run stone, Pennsylvania Department of Transportation Class X.
- C. Bituminous Prime Coat shall be a bituminous material conforming to the Asphalt Institute cutback asphalt Reference Standard MC-1 or RC-1.
- D. Bituminous Binder Course shall be plant mixed, composed of crushed stone aggregate and asphaltic cement. Penetration grade of asphaltic cement (AASHTO): 85-100, 3.5-6.0 percent by weight; Aggregate grading "B." (Penetration grade 60-70; aggregate grading "C.")
- E. Tack Coat shall conform to the Asphalt Institute Reference Standard RC-1.
- F. Bituminous Surface Course shall be 3 in. of plant-mixed asphaltic concrete, AASHTO Type "C." The asphaltic concrete shall be composed of crushed stone aggregate, mineral filler, and asphaltic cement.

PART 3 - EXECUTION

3.01 SPECIFICATIONS

- A. The Contractor shall repave the excavated areas at the USTs and any other areas where the activities have damaged the existing paved surfaces.
- B. All asphalt paving shall be vertically saw cut to present a neat surface for repair. The asphalt paving may be cut before or after asphalt removal.

- C. Asphalt paving shall be done in dry weather when subgrade is sufficiently stable and dry to prevent trapping excessive moisture under pavement.
- D. Base Course shall be applied in one layer spread evenly and thoroughly compacted with a 10- to 12-ton rubber-tired power roller or 7- to 10-ton tandem rollers to a final thickness of 6 in.
- E. Base Course shall be primed with bituminous priming material at a rate of 0.35 gallons per square yard. All dirt, clay, or other objectionable matter shall be removed before application. Cover with No. 19 stone chips at a rate of 18 to 20 pounds per square yard before paving.
- F. Binder Course shall be properly prepared, transported to site, and uniformly spread over Base Course by mechanical paver. In locations impractical to spread the mixture by machine, it shall be placed by hand or other method approved by the Base CO or designee.
- G. Binder Course shall be thoroughly and uniformly compacted by tandem rollers weighing 7 to 10 tons to a final thickness of 2 in. Rolling shall continue until all roller marks are eliminated and no further compression is being achieved. Areas inaccessible to rollers shall be thoroughly compacted by use of hot tampers.
- H. Tack Coat shall be applied uniformly with a pressure distributor at a temperature of 125-150°F prior to surface course application. Surface shall be clean and dry before Tack Coat application. Application rate shall be 0.05 gallons per square yard. Tack Coat shall be applied only so far in advance as is necessary to obtain proper condition of tackiness.
- I. Surface Course shall be spread evenly and continuously over binder course using an approved mechanical spreader in widths not less than 10 ft-0 in. Rolling shall be continued until all roller marks are eliminated and no further compression is being achieved. Concrete curbs, walks, walls, drain inlets, etc., shall be painted with a thin coat of asphaltic cement prior to placing Surface Course where items shall be in contact with Surface Course. Finished thickness shall be 3 in. Finished surface shall be smooth and true to grade with all surfaces draining. No traffic shall be permitted on pavement for 24 hours. Places not accessible to roller shall be thoroughly compacted