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2	1	Cog. Mgr. L. G. Peck		H7-06	"	"	"	"			
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		Safety									
		Env.									

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TANK WASTE REMEDIATION SYSTEM ARCHITECTURE TREE

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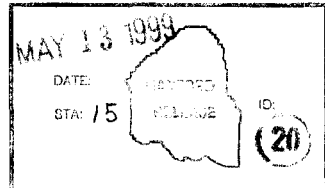
Key Words: System Architecture, System Engineering, HSTD, Requirements Specification

Abstract: The TWRS Architecture Tree is a hierarchical breakdown to support the TWRS engineering analysis of the TWRS physical system, including facilities, hardware and software.

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Tank Waste Remediation System Architecture Tree

May 1999

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Tank Waste Remediation System Architecture Tree

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Tank Waste Remediation System Architecture Tree

1.0 Introduction

1.1 Description

The TWRS Architecture Tree presented in this document is a hierarchical breakdown to support the TWRS systems engineering analysis of the TWRS physical system, including facilities, hardware and software.

1.2 Purpose

The purpose for this systems engineering architecture tree is to describe and communicate the system's selected and existing architecture, to provide a common structure to improve the integration of work and resulting products, and to provide a framework as a basis for TWRS Specification Tree development.

1.3 Architecture Tree Benefits

All TWRS development activities should work toward a single integrated view of the TWRS physical system. The TWRS Architecture Tree facilitates this integrated approach by reducing interface problems and conflicts, and by providing a vehicle for allocating requirements throughout the system. It further supports the integration of test and evaluation and related activities, such as technical performance measurement and risk assessment and analysis.

1.4 Basis for TWRS Architecture Tree

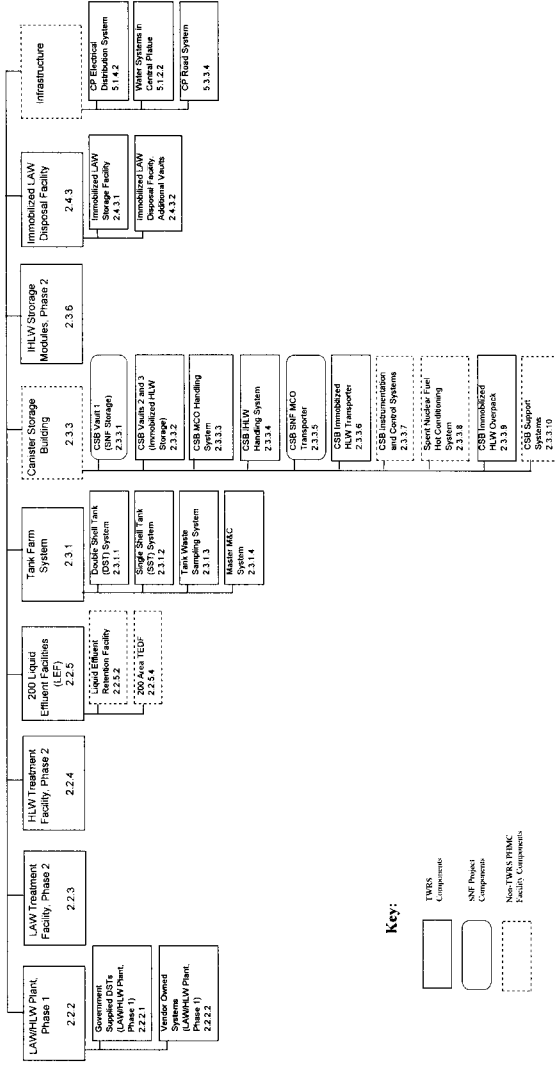
The TWRS Architecture Tree presented in Section 2 of this document is cross referenced to the Hanford Site Technical Database (HSTD) via the HSTD numbering system and where applicable, the H-14-20000 drawing system identification codes. It is structured to enable the development of specifications by system, and provides trade space for system assessment and alternative generation analyses, by recognizing the existing system and maintaining its functional perspective until architectural decisions are completed. The tank farm portion of the TWRS Architecture Tree is mapped to the existing H-14-20000 drawing system identification codes. The drawing codes are listed below the applicable architecture tree blocks through as an alpha character string.

2.0 TWRS Architecture Tree

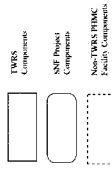
The following pages present the TWRS Architecture Tree, by hierarchical layer, as defined in the HSTD. Each component is described by name and by number. The numbers assigned to each tree component are the "hsems" numbers assigned in the HSTD. These numbers are reflected in the HSTD as, for example, hsems.1.2.3. For brevity sake, the "hsems" prefix to each number was omitted on the tree.

It should be noted that some components are not numbered, indicating that they are not in the HSTD. The data for these components is still in development.

TWRS Architecture Tree

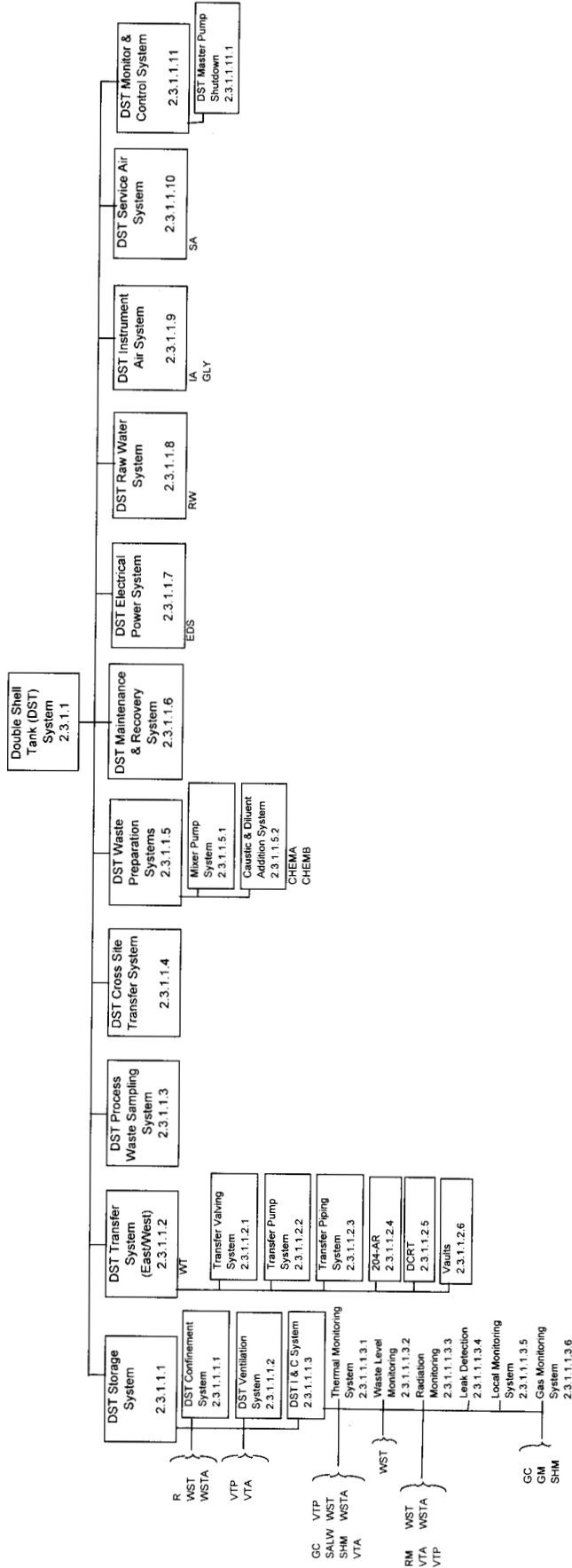


Key:



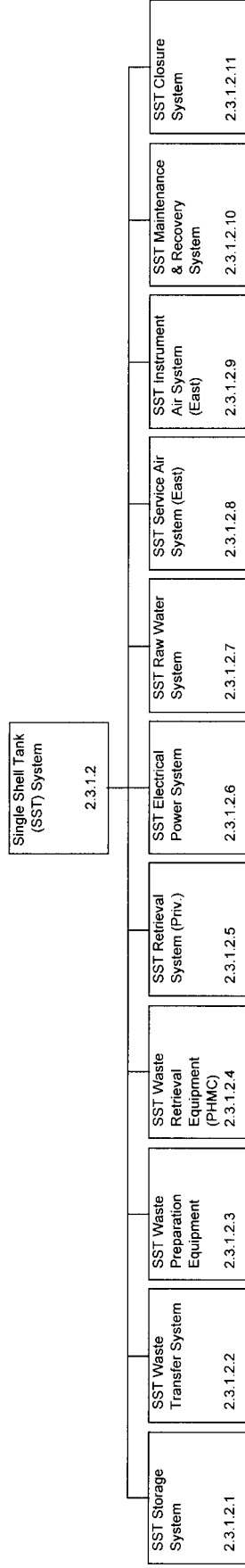
All numbers shown in boxes are hsems, numbers from the HSTD (i.e. hsems.1.2.3)

DST System



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

SST System

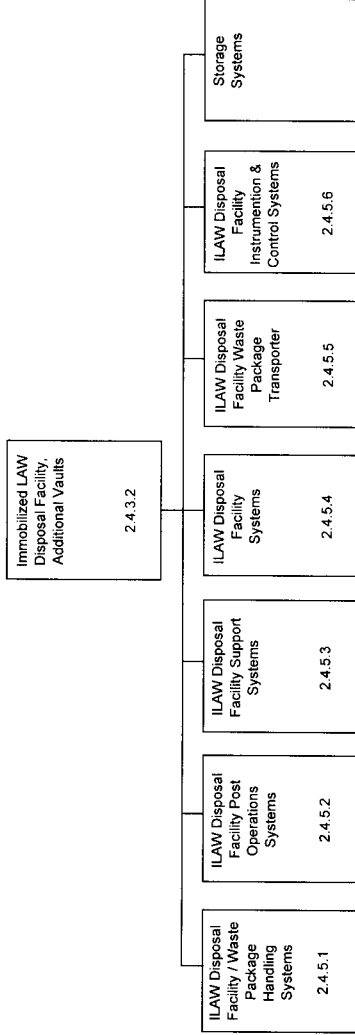


**H-14-020000-Sys ID
Codes Recommended
for Deletion:**

AS	LO
BA	MS
CW	MSA
DG	PW
DI	RADW
EMER	SW
EBA	SEW
FW	URW
HPD	VAC
HYD	

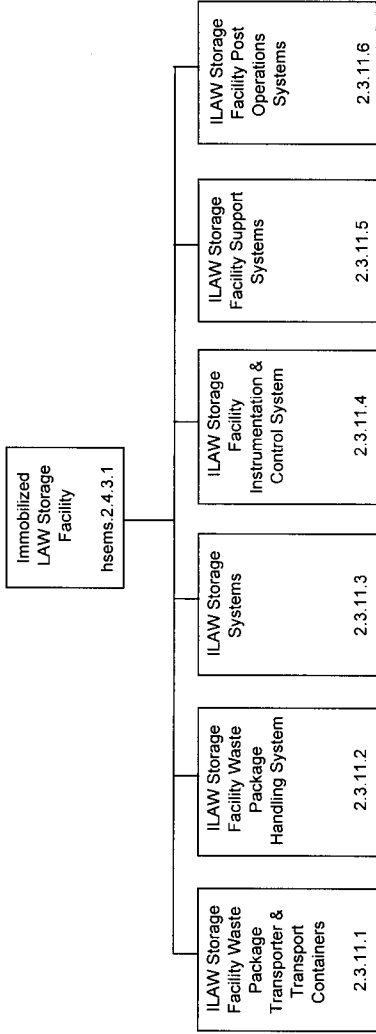
All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

ILAW Disposal System



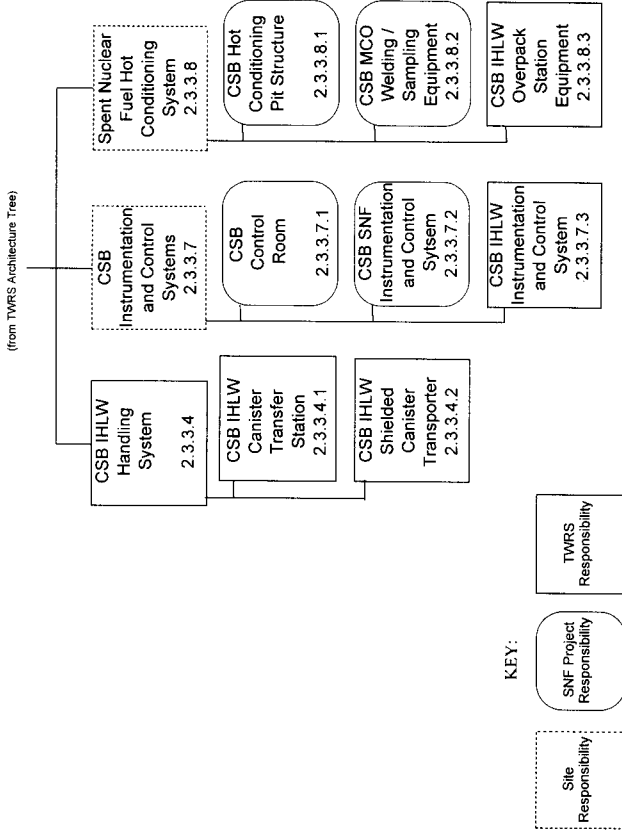
All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. 1.2.3)

ILAW Storage System



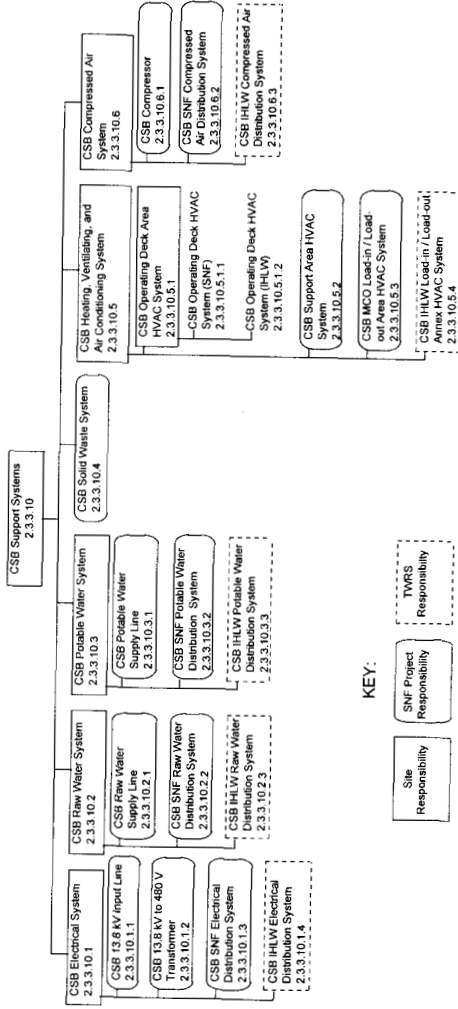
All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

Canister Storage Building



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. 1.2.3)

CSB Support Systems

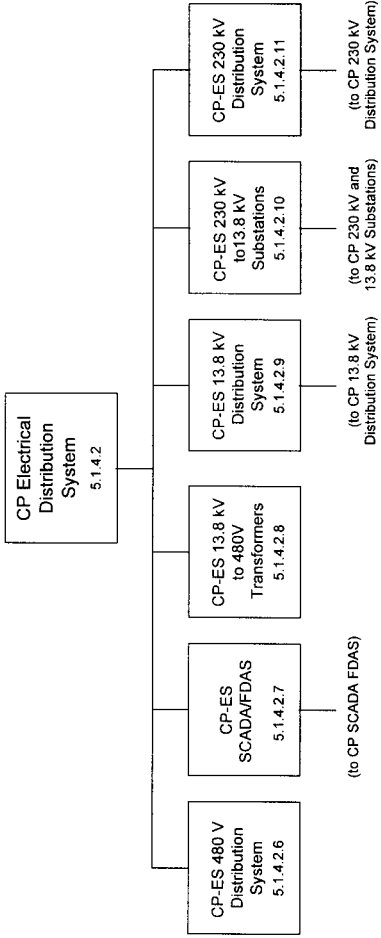


KEY:



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. 1.2.3)

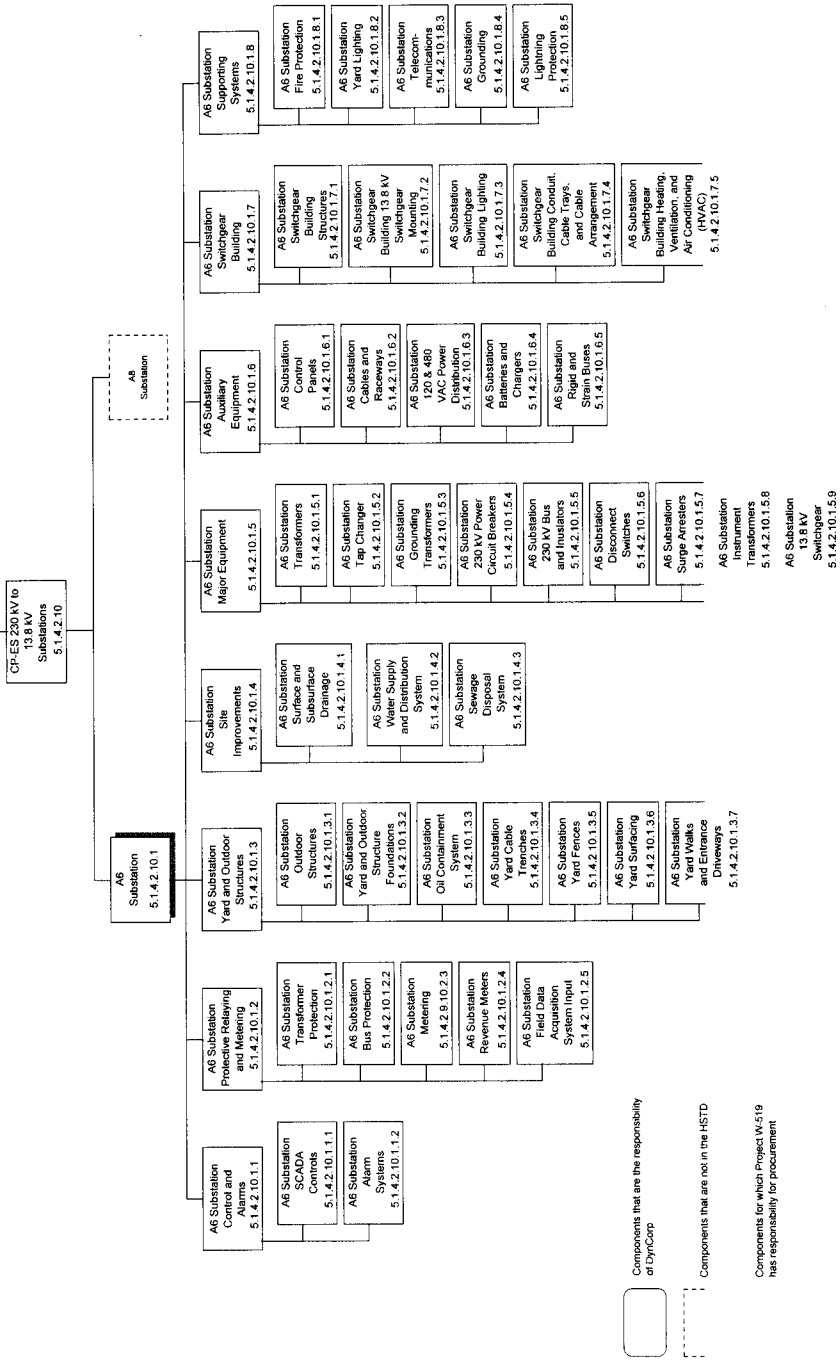
CP Electrical Distribution System



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

CP 230 kV to 13.8 kV Substations

(from CP Electrical Distribution System)



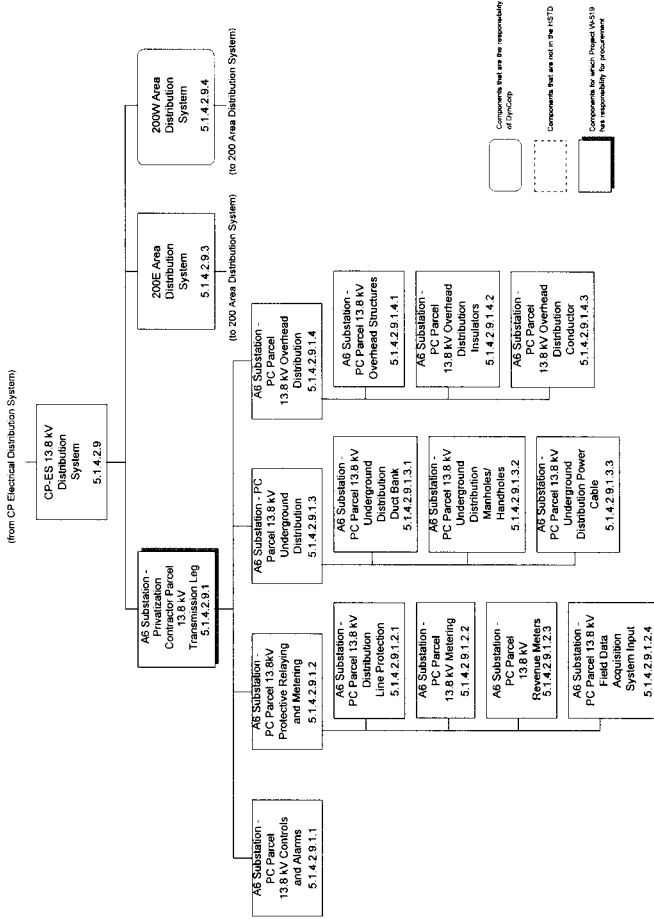
Components that are the responsibility of DYN/CP

Components that are not in the HSTD

Components for which Project W-519 has responsibility for procurement

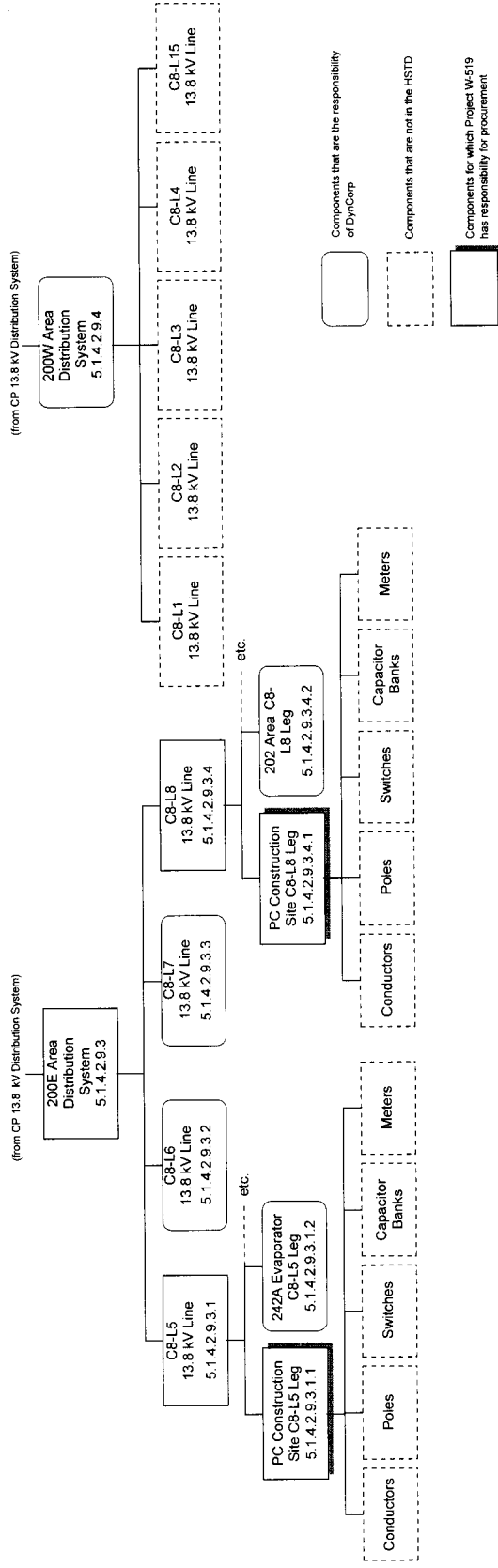
All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

CP 13.8 kV Distribution System



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. 1.2.3)

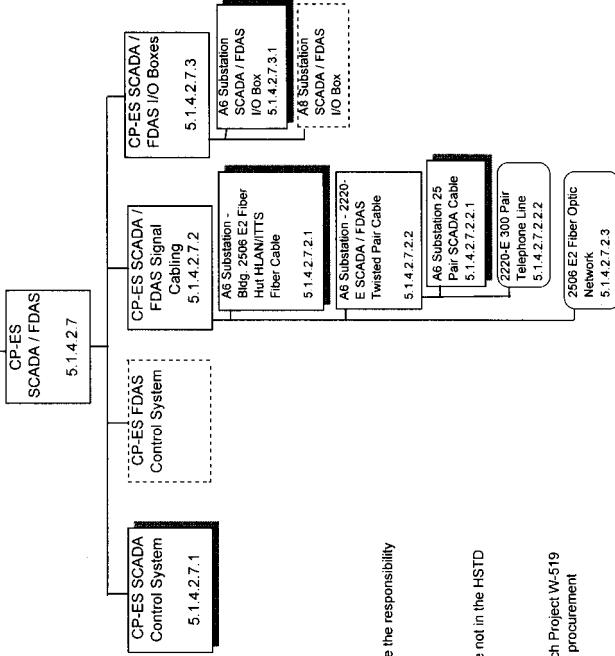
200 Area Distribution System



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

CP SCADA FDAS

(from CP Electrical Distribution System)



Components that are the responsibility
of DynCorp



Components that are not in the HSTD

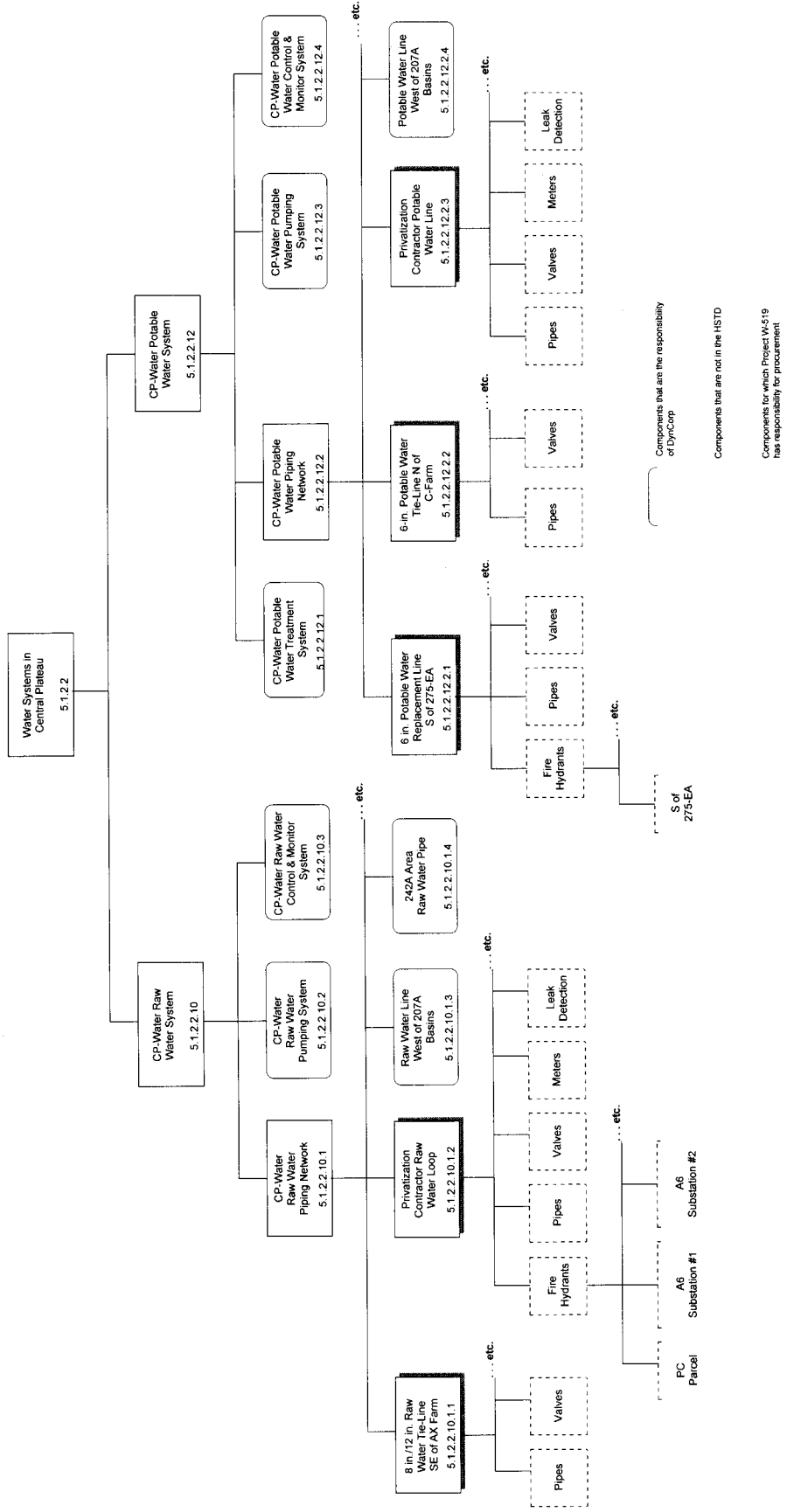


Components for which Project W-519
has responsibility for procurement



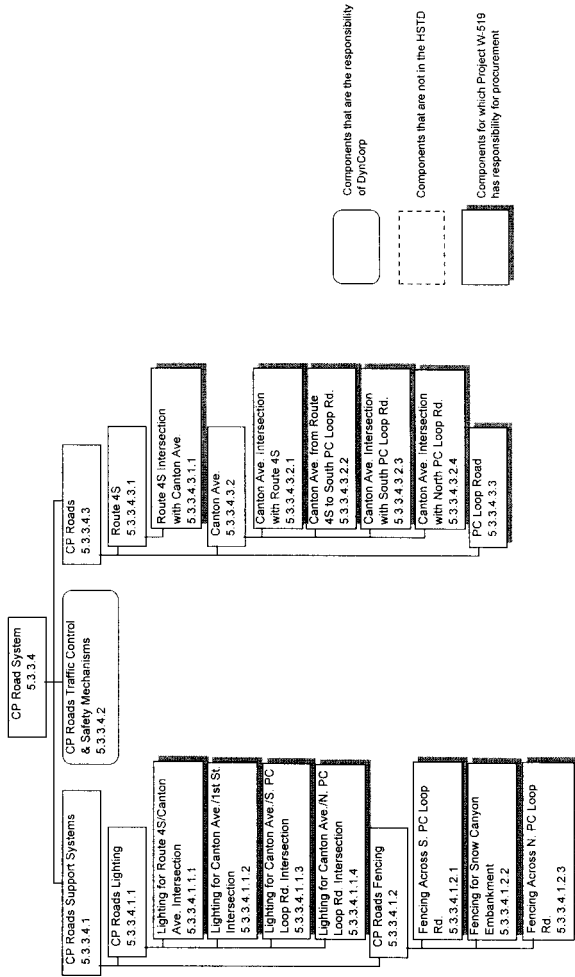
All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

CP Water Systems



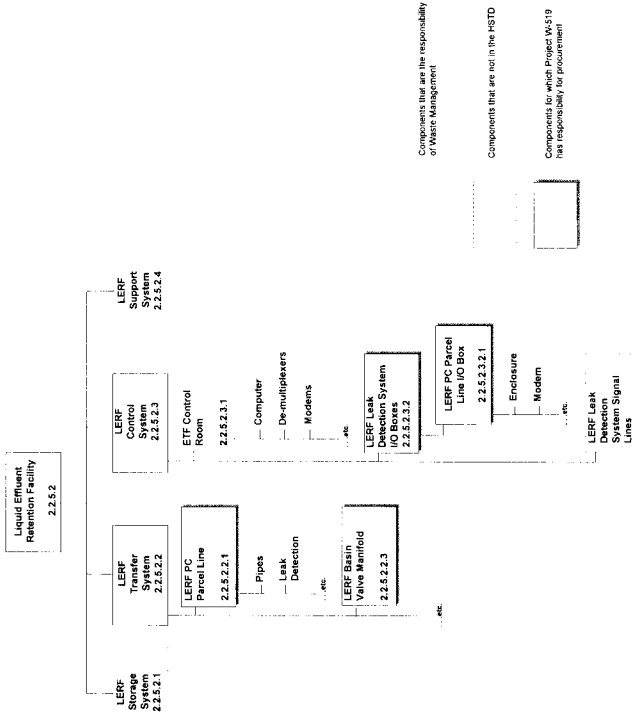
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CP Road System



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems.1.2.3)

LERF



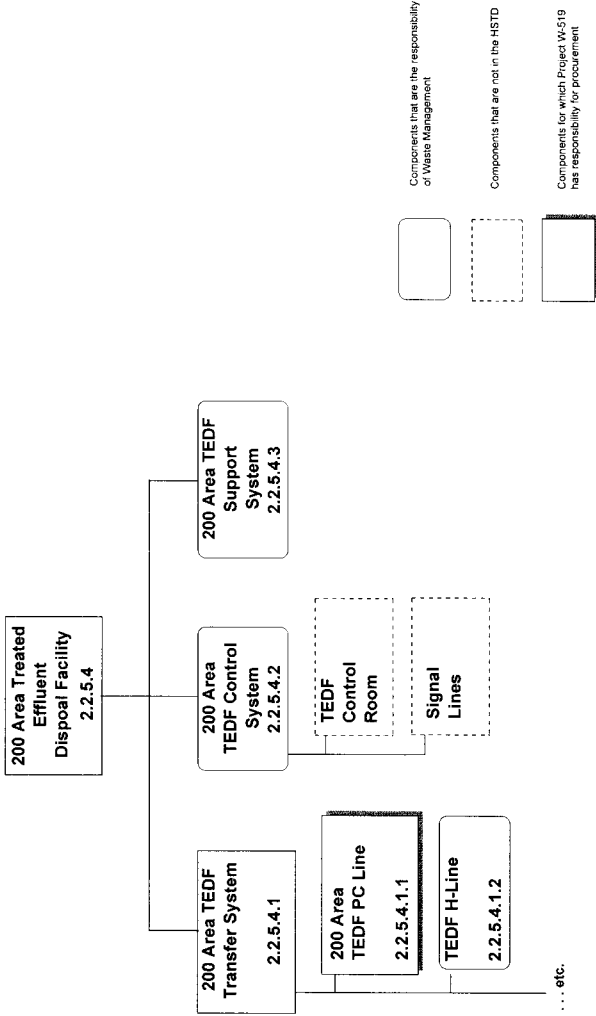
Components that are the responsibility of Waste Management

Components that are not in the HSTD

Components for which Project W-519 has responsibility for procurement

All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. I.2.3)

TEDF



All numbers shown in boxes are hsems. numbers for HSTD (i.e. hsems. 1.2.3)