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ENGINEERING DATA TRANSMITTAL

Page 1 of 1
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		Design Authority				1	1	S. R. Rush	<i>S. R. Rush</i>	4/25/97	E6-14
		Design Agent				1	1	C. H. Brevick	<i>C. H. Brevick</i>	11/25/97	E6-08
1	1	Cog. Eng.	<i>Charles Brevick</i>	12/1/97	E6-08						
1	1	Cog. Mgr.	R. D. Gustavson	R2-33	11/25/97						
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		Env.									
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200-AREA PLATEAU INACTIVE MISCELLANEOUS UNDERGROUND STORAGE TANKS LOCATIONS

C. H. Brevick

Fluor Daniel Northwest, Richland, WA 99352

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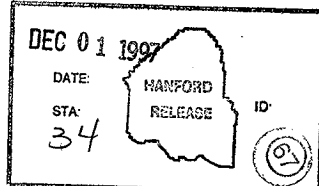
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Abstract: This letter report documents how to access new inactive miscellaneous underground storage tanks (IMUST) location data using the existing Hanford local area network (HLAN). The IMUST data (tank status, tank type, sludge volume, liquid volume and notes) were integrated into the Hanford Site centralized mapping computer database utilizing the computer automated mapping and information system (CAMIS). Note, all new IMUST data were linked to existing Hanford IMUST mapping (names and locations).

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Letter Report

200-Area Plateau Inactive Miscellaneous Underground Storage Tanks Locations

Task Order L-02-41

**Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management**

**Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200**

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LETTER REPORT

200-AREA PLATEAU INACTIVE MISCELLANEOUS UNDERGROUND STORAGE TANKS LOCATIONS

Prepared for

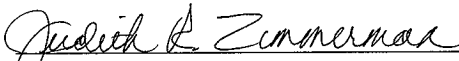
Lockheed Martin Hanford Corporation

November 1997

Prepared by

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Richland, Washington

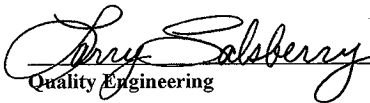
FLUOR DANIEL NORTHWEST


Technical Documents

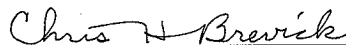
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Date


Technical Author

11/24/97
Date

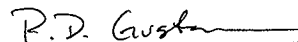

Quality Engineering

11/26/97
Date


Project Manager

11/24/97
Date

LOCKHEED MARTIN HANFORD CORPORATION


Manager, Maintenance Business Operations

11/25/97
Date

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L. E. Hall

R. B. Torres

J. W. Vosahlo

J. C. Williams

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GLOSSARY OF TERMS

AutoCAD - Graphic software by AutoDesk, Inc., used to generate electronic maps and manage external databases.

ArcView - Graphic software by Environmental Systems Research Institute (ESRI) to generate electronic maps and manage external databases.

Basemap - A two dimensional representation of the earth's surface showing natural or man-made features or data used as a background such as roads, rivers, fences, etc.

Centralized mapping system - Referring to CAMIS as a two dimensional representation of all or part of the earth's surface, showing selected natural and/or man-made features or data.

Data discipline - Term used in CAMIS as a type of data. As an example, "structures" refers to all buildings on site; "hazardous areas" refers to any type of data that is considered hazardous.

Discipline - A term used in CAMIS and a sub-catagory within the initial CAMIS dialogue box referring to specific geographic catagories. A collection of similarly formatted records having like information from one or more data sources.

Find - Module of CAMIS found in the CAMIS dialogue box as well as the CAMIS pull-down menu to find an entity within a discipline such as an IMUST tank "name," building name, etc.

Foreground - Visual representation within a selected discipline. The difference between background and foreground is that background disciplines are grey in color and foreground data is a designated color.

Lambert Conformal Cone - A common system for locations on the earth's surface, based upon ground distances.

Metadata - Describes the content, quality, condition, and other characteristics of spatial data. Metadata can also be defined as "data about data."

Mode - A term used in CAMIS and a sub-catagory within the initial CAMIS dialogue box as the "type" of interaction between the user and system.

Spatial Data - Data or information with implicit or explicit information about location.

State Plane Coordinates - A coordinate system used in a systematic construction of features on a plane surface to represent corresponding features on a spherical surface.

Topographic Map - a two dimensional representation of collective features of the surface of the earth, including relief, hydrography, and cultural features.

Vector-topographic - The collective features of the surface of the earth, including relief, hydrography, and cultural features in both numerical value and direction or "vector" format.

View - Selection found within the CAMIS mode box found in the initial CAMIS dialogue box referring to anyone who has access to HLAN but is not authorized to edit data.

Zone - A term used in CAMIS and a sub-category within the initial CAMIS dialogue box as a concentrated area within Hanford such as 200-East Area, 200-West Area, or 300 Area.

LETTER REPORT

200-AREA PLATEAU INACTIVE MISCELLANEOUS UNDERGROUND STORAGE TANKS LOCATIONS

INTRODUCTION

Fluor Daniel Northwest (FDNW) has been tasked by Lockheed Martin Hanford Corporation (LMHC) to incorporate current location data for 64 of the 200-Area plateau inactive miscellaneous underground storage tanks (IMUST) into the centralized mapping computer database for the Hanford facilities. The IMUST coordinate locations and tank names for the tanks currently assigned to the following Hanford Site contractors are listed in Appendix A.

<u>Contractor</u>	<u>Stewardship</u>	<u>Tanks Assigned</u>
B&W Hanford Company	Plutonium Finishing Plant (PFP)	1
Bechtel Hanford, Inc.	Environmental Restoration (ER)	23
Lockheed Martin Hanford Corporation	Tank Waste Remediation System (TWRS)	38
TBD	TBD	2

The IMUST are inactive tanks installed in underground vaults or buried directly in the ground within the 200-East and 200-West Areas of the Hanford Site. The tanks are categorized as tanks with a capacity of less than 190 000 liters (50,000 gal). Some of the IMUST have been stabilized, pumped dry, filled with grout, or may contain an inventory of radioactive and/or hazardous materials. The IMUST have been out of service for at least 12 years.

A centralized mapping computer database used at Hanford is the computer automated mapping and information system (CAMIS). CAMIS is used to organize mapping or "spatial data" into multiple data disciplines with links to the Hanford facility infrastructure and existing equipment databases across the Site.

The centralized mapping system can be used as a data management tool to effectively track and document IMUST data. With the IMUST information available on the HLAN, it is possible to link additional data to the tanks. The type of data can include engineering drawings, photographs, text documents, external databases, and much more. It is recommended to input additional IMUST data such as: tank status, tank type, sludge volume, liquid volume, and notes.

CONCLUSIONS

The IMUST data are tracked and managed to ensure configuration control and to ensure data availability for future revisions to the single-shell tank closure work plan (SST CWP). The IMUST names and locations are now available in the centralized mapping system to anyone with authorization to access the Hanford local area network (HLAN).

APPROACH

The objective of the IMUST mapping effort was to assemble the tank coordinate information from various electronic files, drawings, and technical reports into the centralized mapping computer database (CAMIS) available on the Hanford local area network (HLAN). This centralization provides a means for site-wide IMUST data retrieval.

Some IMUST coordinate locations were electronically converted from the ArcView file format supplied by Bechtel Hanford, Inc., to the Site standard AutoCAD file format. This data conversion process was a one-time task to make the location data acceptable to CAMIS, which is in an AutoCAD format. The metadata report in Appendix B provides additional information.

The remaining IMUST coordinate locations were mapped into CAMIS from technical reports and reference drawings from the Site drawing archive system. The coordinate mapping system used in CAMIS is the Washington State Plane Lambert projection, NAD 83/91, which is the Site standard coordinate system and generates a metric northing and easting coordinate. (See the metadata report in Appendix B.) Instructions on how to access the IMUST location data in CAMIS are shown in Appendix C.

The coordinate locations for the 64 IMUST are plotted on a series of six maps. An overview and detailed views of the IMUST located in the 200-East and 200-West Areas are shown in Appendix D. Symbols indicate the stewardship of the IMUST assigned to TWRS, to BHI, and for the tanks whose ownership is undetermined.

Since no physical or descriptive data for the IMUST were included electronically in CAMIS or were listed on the location maps, an Excel spreadsheet containing this information was developed. Appendix A contains an IMUST centralized mapping cross reference spreadsheet listing the following tanks and waste information.

- Tank number
- Tank type
- Tank status
- Stewardship
- Nominal capacity
- Sludge volume
- Liquid volume
- Total volume
- Reference drawings
- Location coordinates

A key on each page of the spreadsheet defines the acronyms and symbols used. A sample menu containing the above listed tank and waste information was prepared in WordPerfect format and a digital photograph for three tanks was entered as a tank attachment in CAMIS. Work scope limitations prevented further development of this capability for the other IMUST.

RECOMMENDATIONS FOR FURTHER STUDY

The centralized mapping system can be used as a data management tool to effectively track and document IMUST data. With the IMUST information available on the HLAN, it is possible to link additional data to the tanks. This type of data can include engineering drawings, photographs, text documents, external databases, and much more.

FDNW recommends that the following items be addressed to enhance the IMUST database:

- Link the respective IMUST type, status, waste information, and photographs via CAMIS to the Hanford community.
- Link additional external database information and files to the IMUST mapping files in CAMIS.
- Tie the IMUST map data to the site-wide pipeline mapping effort being conducted for the Resource Conservation and Recovery Act (RCRA) requirements and other mapping efforts related to hazardous waste data management.
- Tie the IMUST map data to the associated process plants and single-shell or double-shell waste storage tanks.

Completion of the above items would couple the IMUST information to existing databases and allow queries and sorting of the IMUST data to support the needs of the Hanford Site users.

REFERENCES

1. Study, "Engineering Study of 50 Miscellaneous Inactive Underground Radioactive Waste Tanks Located at the Hanford Site," prepared by Golder Associates, Inc., and Engineering-Science, Inc., for Westinghouse Hanford Company, Document No. WHC-SD-EN-ES-040, 1994.
2. Survey Data Report, "200 E-W Underground Storage Tank Retrieval," prepared by Kaiser Engineers Hanford for Westinghouse Hanford Company, Document No. 2EWA-056, December 1994.
3. Survey Data Report, "200-W U/G Storage Tanks Retrieval," prepared by Kaiser Engineers Hanford for Westinghouse Hanford Company, Document No. 2EWA-056, March 1995.
4. Data, "Waste Information Data System (WIDS) General Summary Reports," prepared by Westinghouse Hanford Company for the Hanford Site, March 8, 1995 and August 1, 1995.

APPENDIX A

IMUST CENTRALIZED MAPPING CROSS REFERENCE

IMUST CENTRALIZED MAPPING CROSS REFERENCE

HNF-1566, Rev. 0

ITEM	IMUST TANK	STEWARDS	TANK TYPE	STATUS	Nominal Capacity	Sludge Volume (gal)	Liquid Volume (gal)	Total Volume (gal)	REFERENCE DRAWING(S)	COORDINATE LOCATION
1	213-W-TK-1	TVRS	Storage	Inactive	1,875	unknown	unknown	unknown	H-2-93690, H-2-93710, H-2-93713	Eastings (X) Northings (Y) 565905 3451, 136837 2031
2	216-BC-201	BHI	Flush	ISO & STB	8,228	unknown	unknown	unknown	H-6-461, SH-27, H-2-2270	573640 0000, 134442 0000
3	216-BY-201	TVRS	Flush	ISO & STB	8,228	unknown	unknown	unknown	H-2-2603	573608 3007, 137587 7829
4	216-TY-201	TVRS	Flush	ISO & STB	8,228	unknown	unknown	unknown	H-2-2670	566849 0638, 136414 5338
5	231-W-151-001	TVRS	Settling Vault	ISO 1974	4,000	0	1,430	1,430	H-W-74187, H-2-1360, 1361, 1362, 1375, 1376, 1377, 1378	566548 0000, 135896 0000
6	231-W-151-002	TVRS	Settling Vault	ISO 1974	960	10	960	960	H-W-74187, H-2-1360, 1361, 1362, 1375, 1376, 1377, 1378	566548 0000, 135896 0000
7	240-S-302	TVRS	Catch	O/S 187 Confirmed Leaker	17,684	unknown	unknown	2,276	SK-2-52885, H-2-38979, 68286, 58040	573463 6875, 136065 9375
8	241-A-302B	TVRS	Catch	O/S 1985, STB 1980	13,500	unknown	unknown	3,600	SK-2-52885, H-2-38979, 68286, 58040	573463 6875, 136065 9375
9	241-XX-151	TVRS	Dwyer Str	O/S 1985 /ISO 1985, STB	11,000	unknown	unknown	unknown	H-2-44762, H-2-44790, SK-2-23421, H-2-44587, 44588, 44589, 90371	573745 3125, 137328 6250
10	241-B-301B	TVRS	Catch	O/S 1984, SPL	36,000	21,660	960	22,250	H-2-36269, 38980, 73273, 73274	573807 1875, 136452 8438
11	241-B-302B	TVRS	Catch	O/S 1987 /IS 5-85	17,684	690	4,240	4,930	H-2-36269, 38980, 73273, 73274	573770 4375, 136707 7344
12	241-B-361	BHI	Settling	O/S 1947, 150 1965	36,000	20,628	0	20,628	W-72902, H-2-4750, H-2-44501, SH-107, H-2-71677	573672 8125, 137283 4688
13	241-BX-302A	TVRS	Catch	O/S 1985/ 1991	17,684	840	0	840	H-2-35940, H-2-38981, 73273, H-2-635, H-2-610, 619, 636, 618	573493 8750, 136444 8584
14	241-BX-302B	TVRS	Catch	O/S 1985 /ISO 1985	11,389	950	90	1,040	H-2-35940, H-2-38981, H-2-610, H-2-619, H-2-73273, H-2-635, H-2-636, H-2-618	573679 4375, 136854 2500
15	241-BX-302C	TVRS	Catch	O/S 1985 /ISO 8/STB	11,378	640	230	870	H-2-35940, H-2-38981, H-2-610, H-2-619, H-2-73273, H-2-635, H-2-636, H-2-618	575112 2500, 136636 1250
16	241-C-301C	TVRS	Catch	O/S 1983, ISO	36,000	9,000	1,470	10,470	H-2-38983, H-2-23462	574610 6250, 136298 6719
17	241-CX-70	BHI	Waste Holding	O/S 1957, 150 1992	30,000	0	0	0	H-2-4010, H-2-4319, H-2-4320, 21,22,23, H-2-4335, H-2-4420, H-2-32886, H-2-44501, SH-82, SK-2-4657	574632 2500, 136316 9063
18	241-CX-71	BHI	Neutralization	O/S 1957, 150 1986	1,000	930	0	930	H-2-4010, H-2-4420, H-2-4635, H-2-44501, H-2-95603, SH-82, SK-2-4657, SK-2-56856	574632 2500, 136316 9063
19	241-CX-72	BHI	Experimental	O/S 1957, ISO 1986	2,300	653	0	653	H-2-2554, H-2-2563, H-2-2588, H-2-4010, H-2-4420, H-2-4422,23, H-2-44501, SH-82, SK-2-4567, H-2-79562, H-2-79565	573219 4375, 136280 2969
20	241-EX-311A	TVRS	Catch	O/S 1954 /ISO, STB	14,314	unknown	unknown	unknown	H-2-2537, H-2-2542, H-2-43031, H-2-43108, H-2-824723, H-2-2538, H-2-2338	566924 2188, 134336 5869
21	241-S-302A	TVRS	Catch	O/S 1991, ISO 8-51	17,684	unknown	unknown	5,130	H-2-38984, H-2-38010, H-2-85030, H-2-85031, H-2-85032, H-2-1795, H-2-1796, H-2-1820	566870 1250, 134514 9844
22	241-S-302B	TVRS	Catch	O/S 1984, /IS 1984	14,314	0	0	0	H-2-37719, H-2-37720	566864 0625, 134306 4531
23	241-SX-302	TVRS	Catch	O/S 1984, STB 1984	17,684	1,050	300	1,350	H-2-38985, SK-2-22761, SK-2-22238	566877 2564, 136638 8906
24	241-T-301B	TVRS	Catch	O/S 1985, Shab 7-85	36,000	21,660	690	22,250	H-W-72903, H-2-38987	566877 8579, 136735 1366
25	241-T-302	TVRS	Catch	TBD	unknown	unknown	unknown	unknown	DOE/RI-91-61, REV 0	567193 1317, 136660 2537
26	241-T-361	BHI	Settling	O/S 1976, 150 1985	36,000	24,500	0	24,500	W-72902, H-2-951, H-2-1748, H-2-44511, SH-133, H-2-71676, SK-2-4661	566933 6250, 136133 2031
27	241-TX-302A	TVRS	Catch	O/S 1982, ISO & Shab 1984	17,684	2,450	30	2,480	SK-2-2419, H-2-36632, 35520, 2536 2542, 823, 832, 833, 836, 840, 970	567110 5800, 136114 4375
28	241-TX-302B	TVRS	Catch	O/S 1954, /IS 1954	17,684	unknown	unknown	1,320	SK-2-2419, H-2-36632, 35520, 2536 2542, 823, 832, 833, 836, 840, 970	567108 6250, 136104 5469
29	241-TX-302B (R)	TVRS	Catch	O/S, /IS 1984	12,000	1,080	50	1,140	SK-2-2419, H-2-36632, 35520, 2536 2542, 823, 832, 833, 836, 840, 970	566828 7500, 136147 8125
30	241-TX-302X	TVRS	Catch	O/S 1985, ISO & STB 6/85	14,314/7K	110	250	360	SK-2-2419, H-2-36632, 35520, 2536 2542, 823, 832, 833, 836, 840, 970	566828 0000, 136365 7031
31	241-TY-302A	TVRS	Catch	O/S 1981, ISO & STB 6/85	17,684	450	0	450	H-2-2233, 2234, 2268, 2269, 2270, 2271, 38989	566824 4375, 136448 5938
32	241-TY-302B	TVRS	Catch	O/S 1985, ISO & STB 12/84	14,314	0	0	0	H-2-2233, 2234, 2268, 2269, 2270, 2271, 38989	

Key:
 O/S = Out of Service, If no date, the final date of operations was used.
 /IS = Interim Stabilized
 ISO = Isolated
 STB = Stabilized
 SPL = Sampled
 TVRS = Tank Waste Remediation System
 BHI = Bechtel Hanford Inc.
 TBD = To Be Determined

IMUST CENTRALIZED MAPPING CROSS REFERENCE

HNH-1566, Rev. 0

ITEM	IMUST TANK	STEWARDS	TANK TYPE	STATUS	Nominal Capacity	Sludge Volume (gal)	Liquid Volume (gal)	Total Volume (gal)	REFERENCE DRAWING(S)	COORDINATE LOCATION
33	241-U-361	BHI	Settling	O/S 1957, ISO 1985	36,000	27,734	98	27,832	W-72902, H-2-1749, H-2-44511, SH-61, H-2-50061, H-2-71676, SK-2-4661	Easting (X) Northing (Y) 567297.0670, 135008.1886
34	241-WR-001	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40086, H-2-40226, H-2-40267, H-2-44500, SH-75, H-2-71659, H-2-71667, 68.69	567711.0671, 135314.3960
35	241-WR-002	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40112, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
36	241-WR-003	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40112, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
37	241-WR-004	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40112, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
38	241-WR-005	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40112, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
39	241-WR-006	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40104, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
40	241-WR-007	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40112, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
41	241-WR-008	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-33986, H-2-40061, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
42	241-WR-009	BHI	Vault	O/S 1976, ISO 1985	50,000	unknown	unknown	unknown	H-2-2945, H-2-40061, H-2-40226, H-2-40267, H-2-44511, SH-75, H-2-71667, 68.69	567711.0671, 135314.3960
43	241-Z-8	TPRS	Settling	O/S 1962, ISO & STB	15,435	500	0	500	H-2-87382, SK-2-4271, 22454, 22259, 22260, 23146, 23183, 23145, 44578	566547.7500, 135514.8594
44	241-Z-361	PPP	Settling	O/S 1976	40,500	20,000	200	20,200	H-2-16024, H-2-16460, H-2-44511, SH-87, H-2-71631, H-2-71679	566546.4552, 135515.6142
45	242-T-135	TPRS	Decan	ISO & STB	830	unknown	unknown	unknown	H-2-1208, 1852	566818.0262, 136312.0259
46	242-TA-R1	TPRS	Reclaver	ISO & STB	4,200	unknown	unknown	unknown	H-2-27339, 27275	566823.4318, 136308.7856
47	243S-TK-1	TPRS	Decan	ISO & STB	550	unknown	unknown	unknown	H-2-72865	566719.0000, 134668.0000
48	244-BXR-001	TPRS	Vault, UR	O/S 1957, ISO 1985, SPL 1974	50,000	7,200	0	7,200	H-2-44502, 42317, 42103	573573.5625, 137257.5859
49	244-BXR-002	TPRS	Vault, UR	O/S 1957, ISO 1985, SPL 1974	15,000	1,800	380	2,180	H-2-44502, 42317, 42103	573573.5625, 137257.5859
50	244-BXR-003	TPRS	Vault, UR	O/S 1957, ISO 1985, SPL 1974	15,000	1,450	360	1,810	H-2-44502, 42317, 42103	573573.5625, 137257.5859
51	244-BXR-011	TPRS	Vault, UR	O/S 1956, SPL 1974	50,000	7,000	100	7,100	H-2-44502, 42317, 42103	573573.5625, 137257.5859
52	244-TKR-001	TPRS	Vault, UR	O/S 1956, STB72 1984	50,000	2,300	50	2,350	H-2-71662	566790.8438, 136101.7891
53	244-TKR-002	TPRS	Vault, UR	O/S 1956, ISO & STB 1984	15,000	2,950	0	2,950	H-2-71662	566790.8438, 136101.7891
54	244-TKR-003	TPRS	Vault, UR	O/S 1985, ISO & STB 1984	15,000	6,500	0	6,500	H-2-71662	566790.8438, 136101.7891
55	244-UR-001	BHI	Slurry/Vault	O/S 19767, ISO 1984	50,000	1,852	390	2,242	H-2-40044, H-2-40218, 19.20, H-2-44511, SH-70, H-2-71658, 59, H-2-71667	566793.2678, 135162.4158
56	244-UR-002	BHI	Blend/Vault	O/S 19767, ISO 1985	15,000	2,304	214 or 570	2,518	H-2-40044, H-2-40218, 19.20, H-2-44511, SH-70, H-2-71658, H-2-71667	566793.2678, 135162.4158
57	244-UR-003	BHI	Blend/Vault	O/S 19767, ISO 1985	15,000	1,568	0	1,568	H-2-40044, H-2-40218, 19.20, H-2-44511, SH-70, H-2-71658, H-2-71667	566793.2678, 135162.4158
58	244-UR-004	BHI	Acid/Vault	O/S 19767, ISO 1985	8,000	unknown	unknown	unknown	H-2-40044, H-2-40218, 19.20, H-2-44511, SH-70, H-2-71658, H-2-71667	566793.2678, 135162.4158
59	270-E-1	BHI	Neutralization	O/S 1976, ISO 1985	9,185	3,800	0	3,800	H-2-43046, H-2-43110, H-2-43118, H-2-44501, SH-97, H-2-71678, SK-2-4663	573210.7034, 136444.1904
60	270-W	TPRS	Neutralization	O/S 1985, ISO 1970	3,780	unknown	unknown	unknown	H-2-71678	567611.0527, 135059.7763
61	276-S-141	BHI	Storage	O/S 1989	23,000	0	min. heel	min. heel	H-2-5301, H-2-5303, H-2-5304, H-2-44511, SH-29, H-2-71675, SK-2-56958	567287.2852, 134032.7543
62	276-S-142	BHI	Storage	Inactive	23,000	0	min. heel	min. heel	H-2-5301, H-2-5303, H-2-5304, H-2-44511, SH-29, H-2-71675, SK-2-56958	567287.2852, 134037.9351
63	282-T-TK-1	TBD	Waste Holding	unknown	50	unknown	unknown	unknown	No drawings are available (coordinates are approximate location)	567656.000, 136838.0000
64	282-T-TK-2	TBD	Waste Holding	unknown	50	unknown	unknown	unknown	No drawings are available (coordinates are approximate location)	567656.000, 136838.0000

Key:
 O/S = Out of Service, If no date, the final date of operations was used.
 I/S = Interim Stabilized
 ISO = Isolated
 STB = Stabilized
 SPL = Sampled
 TPRS = Tank Waste Remediation System
 BHI = Bechtel Hanford Inc.
 TBD = To Be Determined

APPENDIX B

IMUST METADATA REPORT

IMUST METADATA REPORT

Metadata, or “data about data,” describe the content, quality, condition, and other characteristics of IMUST data. This metadata report specifies the information content of metadata for the IMUST digital geospatial data and specifies information for prospective users to determine what data exist, the fitness of the data for application, and the conditions for accessing the data. Metadata also aid the transfer of data to other users’ systems.

This report is not intended as instructions for the user, but is intended as an information source for the quality and content of the electronic file for future use. Having the knowledge made available that describes ownership, coordinate system used, and file format offer a higher level of pedigree to the dataset. The 1994 Executive Order 12906, “Coordinating Geographic Data Acquisition and Access,” mandates federal agencies to accompany metadata with each data set that is generated. The order instructs all federal agencies to cooperatively produce and share geospatial data to the maximum extent possible. This is achieved through local implementation and adaptation of the policies, standards, and guidance developed by the Federal Geographic Data Committee (FGDC) and the National Spatial Data Infrastructure (NSDI) as well as through implementation of U.S. Department of Energy, Richland Operations Office policy, guidance, and standards. The IMUST metadata report is available upon request by calling FDNW Design Services and Support at 376-4001.

General: Information about the dataset

Data_Set_Identity: Topographic Map of IMUST in the 200-East and 200-West Areas

Presentation_Model: Vector-topographic

Intended_Use: Provide geographic location of IMUST on the Hanford Site

Data_Set_Extent: approx. 1450 km² (State plane coordinate, Washington south zone).

Data_Owner: U.S. Department of Energy, Richland Operations Office

POC- To be determined

Geographic Information: The geographic area and projection

Geographic_Area: 200-East and 200-West Areas within the Hanford Site

Intended_Scale_Of_Use: 1:12,000 metric

Resolution_Of_Data: 0.5 meter

Projection_Name: Lambert Conformal Cone

Horizontal_Datum_Or_Ellipsoid: NAD83/91

State_Plane_Coordinate_Zone: Washington South

Vertical_Datum: NAVD 88

Projection_Units: meters

Coordinate_Precision: double

Mapping: The software used and any file transfer activity

Compilation_Performed_By: FDNW Design Services and Support, Richland, Washington

Softwares_Utilized: ArcView, AutoCAD Release 12 for Windows, AutoCAD Map 2.0

Map_Accuracy: Meets Map Accuracy Standards for the map scale presented

File_Types_Generated: ArcView SHP and AutoCAD DWG

File_Transfer_Information: Edited ArcView SHP files were converted to AutoCAD format on Site using the computer automated mapping information system (CAMIS) standards

APPENDIX C

IMUST LOCATIONS IN THE CENTRALIZED MAPPING SYSTEM

IMUST LOCATIONS IN THE CENTRALIZED MAPPING SYSTEM

The following steps detail how to locate the IMUST geographic information in the centralized mapping system. The work station must be connected to HLAN and have a network license for AutoCAD.

Double click the CAMIS icon on the computer to access the centralized mapping system. At the dialogue box, select from each box:

1. Mode: Select "VIEW."
2. Zone: Select the desired area or "Zone," for example: Z21, 200E.
3. Disciplines: Under "Foreground," select the desired disciplines.
NOTE: The IMUST data is located under discipline 10,
Hazardous Areas.
4. Select the "OK" button.

A map of the selected disciplines will generate on the screen within the centralized mapping system. Once this process is complete, an IMUST can be found by following these steps:

1. Select the pull down menu "CAMIS."
2. Select the "FIND" option.
3. A "Find Item" dialogue box will appear.
4. Under "Predefined Searches," leave the default at none.
5. Under "Search Discipline," select 10, "Hazardous Areas."
6. Under "Search Type," select "Text."
7. Under "Search Value," type the desired IMUST name (this feature is case sensitive).
8. Select "OK."

The queried IMUST location will appear on the monitor as a flashing circular pattern.

Further information about the IMUST can be found by following these commands:

1. Follow the "FIND" command once one of the IMUST is located.
2. The FIND dialogue box will show the following hot buttons that are located in the lower right of the monitor screen.
 - Data: Click this button to display metadata or photographs of the IMUST.
 - Show: Indicates the IMUST location on the map and a circle will appear on the screen.
 - Zoom: Allows the IMUST object to be zoomed in closer on the screen.

If assistance is needed to access the IMUST data or maps on CAMIS, contact the FDNW Design Services and Support manager at (509) 376-2532 or 376-4001.

APPENDIX D

MAPS

200-East Area

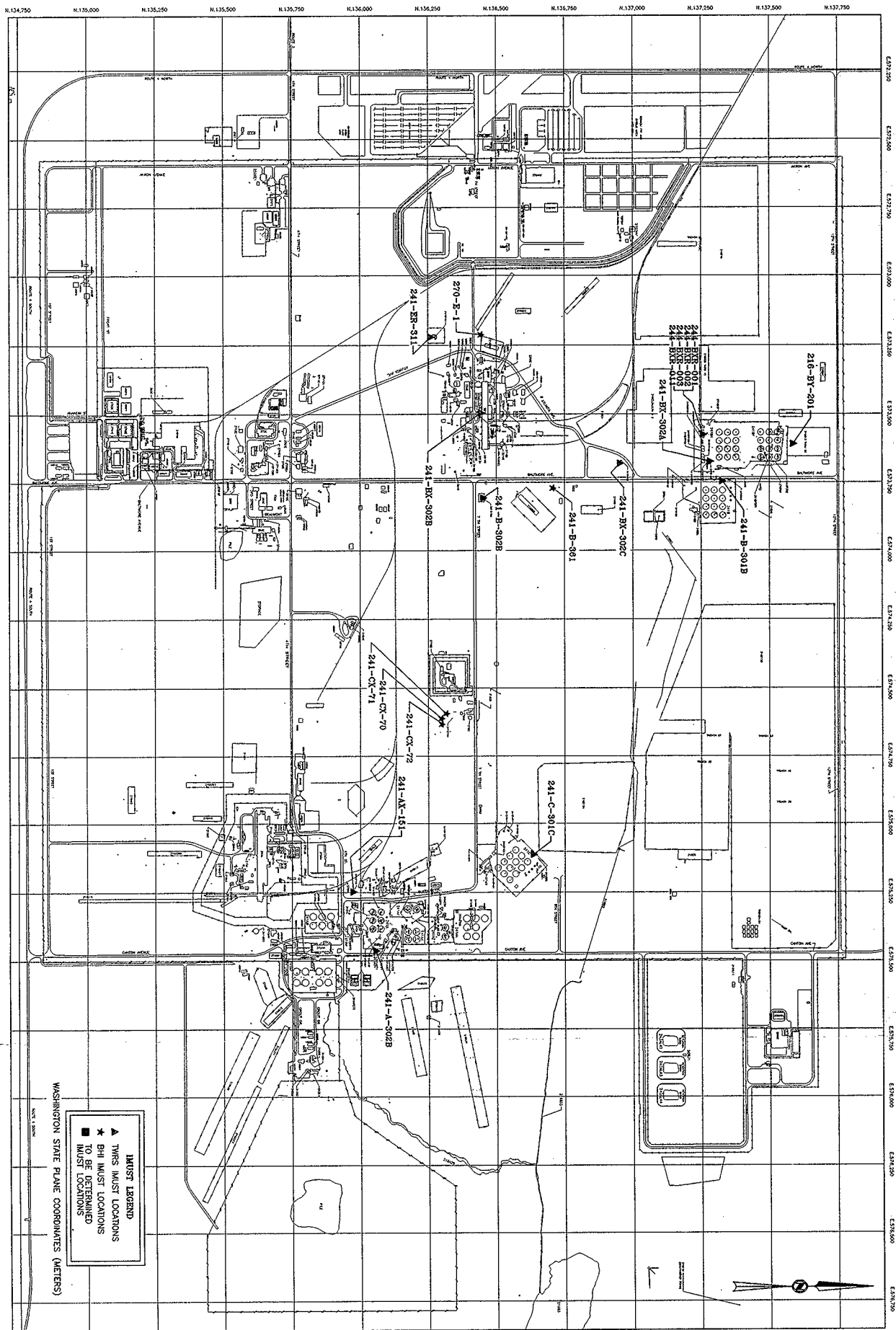
200-East Area (East) IMUST Locations

200-East Area (West) IMUST Locations

200-West Area

200-West Area (North) IMUST Locations

200-West Area (South) IMUST Locations



NOTE: THIS MAP IS FOR REFERENCE ONLY. DO NOT

FLUOR DANIEL NORTHWEST INC.

DATE: 2/20/70

DESIGN: LMHC

TITLE: 200 EAST AREA

81E THIS MAP IS COPIED FROM THE ORIGINAL MAP

MATCH LINE TO PAGE 0-5 (COPIES 288070)

E.574,250 E.574,500 E.574,750 E.575,000 E.575,250 E.575,500 E.575,750 E.576,000 E.576,250

N.137,750 N.137,500 N.137,250 N.137,000 N.136,750 N.136,500 N.136,250 N.136,000 N.135,750 N.135,500 N.135,250 N.135,000 N.134,750



MUST LEGEND
▲ THRS MUST LOCATIONS
★ BH MUST LOCATIONS
■ TO BE DETERMINED MUST LOCATIONS

HN-1566 R
N.134,750

E.572,250 E.572,500 E.572,750 E.573,000 E.573,250 E.573,500 E.573,750 E.574,000

N.137,750 N.137,500 N.137,250 N.137,000 N.136,750 N.136,500 N.136,250 N.136,000 N.135,750 N.135,500 N.135,250 N.135,000 N.134,750

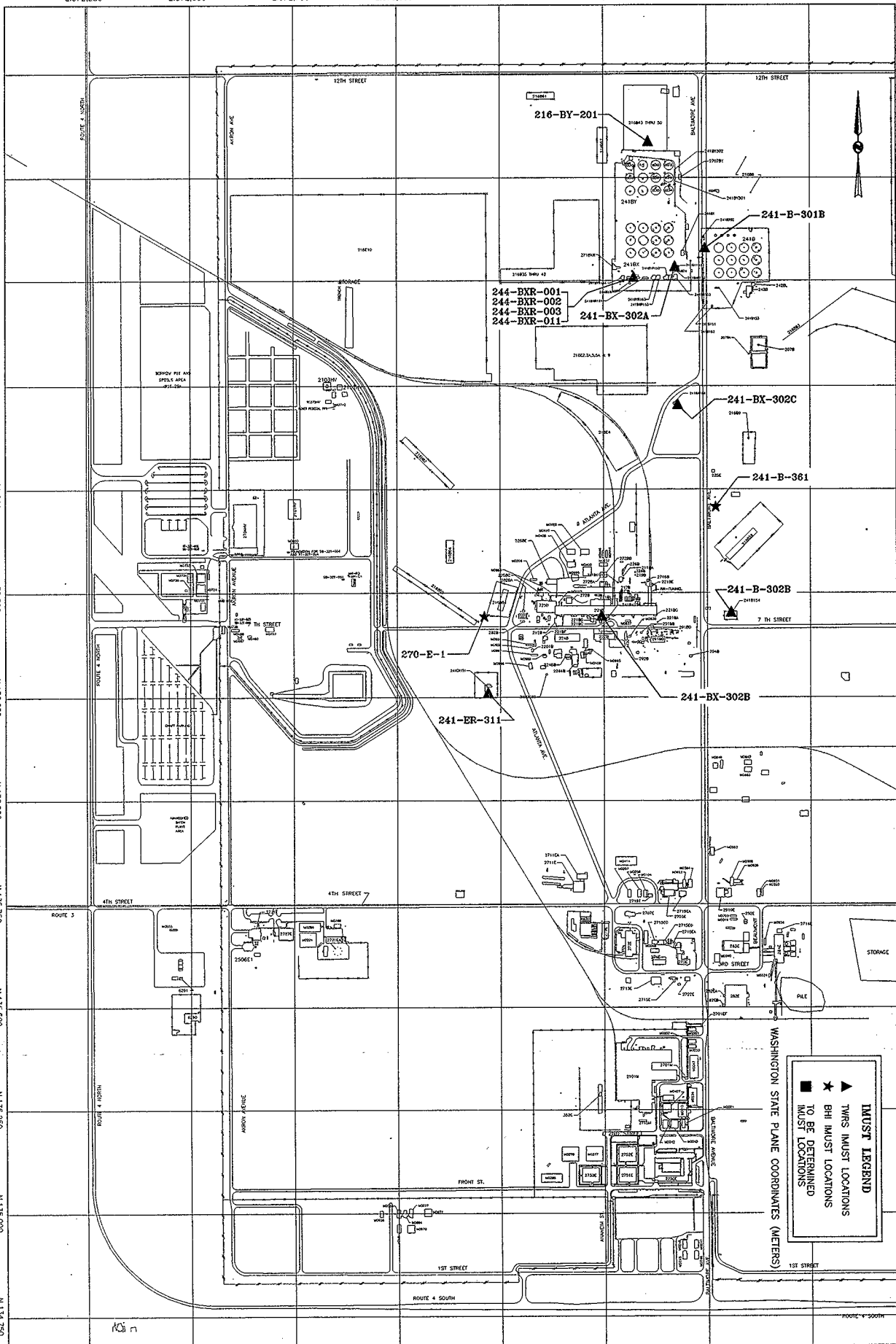
NOTE: THIS MAP IS FOR REFERENCE ONLY. DO NOT

FLUOR DANIEL NORTHWEST INC.

CONTRACT: Z8870709

CUSTOMER: LMIC

FILE: 200 EAST AREA (WEST)



MATCH LINE TO PAGE D-6 (CONTRACT: Z8870709)

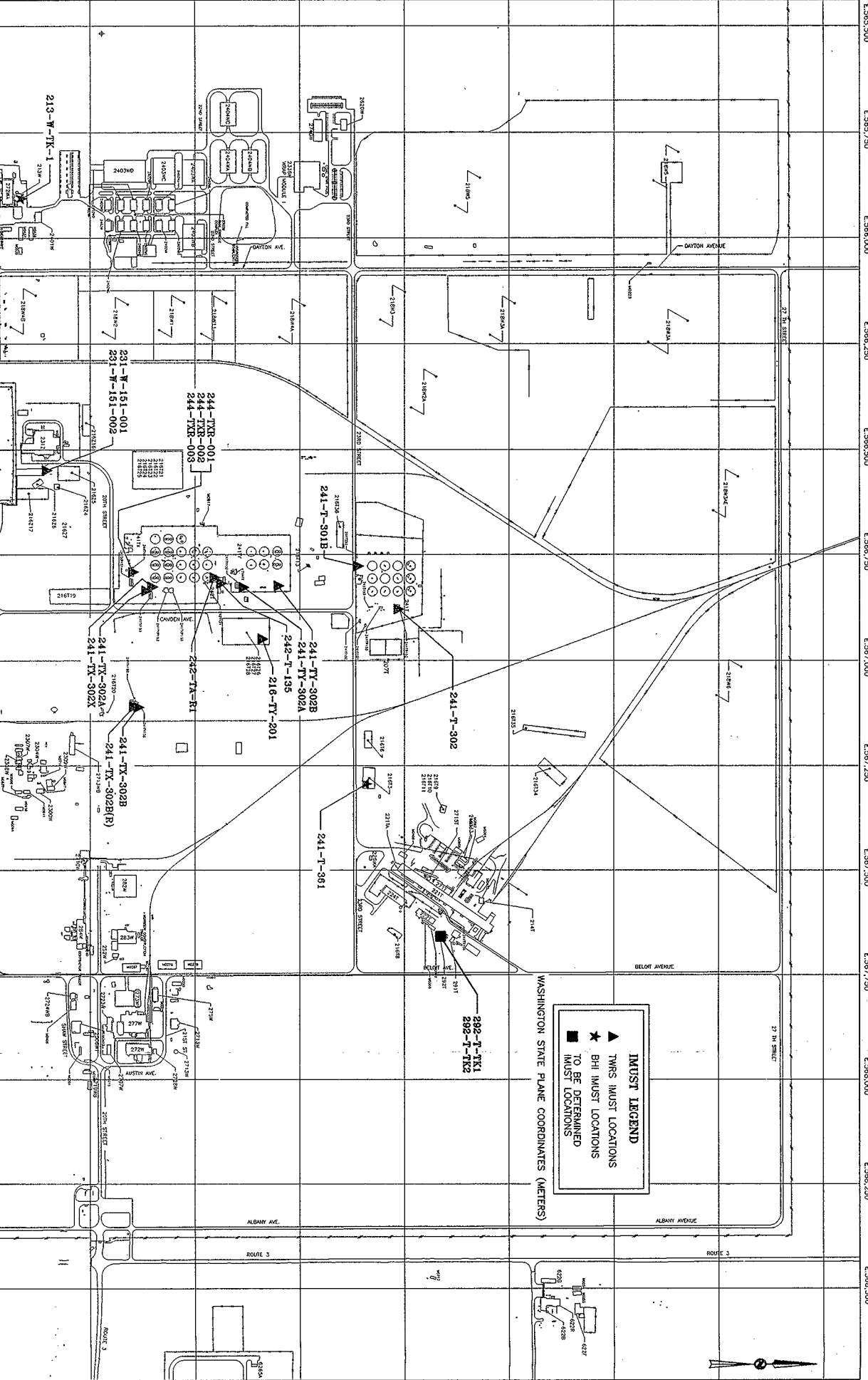
200 WEST AREA



N.136,000 N.136,250 N.136,500 N.136,750 N.137,000 N.137,250 N.137,500 N.137,750

E.565,500 E.565,750 E.566,000 E.566,250 E.566,500 E.566,750 E.567,000 E.567,250 E.567,500 E.567,750 E.568,000 E.568,250 E.568,500

HNF-1506 REV. 0



NOTE: THIS MAP IS FOR REFERENCE ONLY. DO NOT

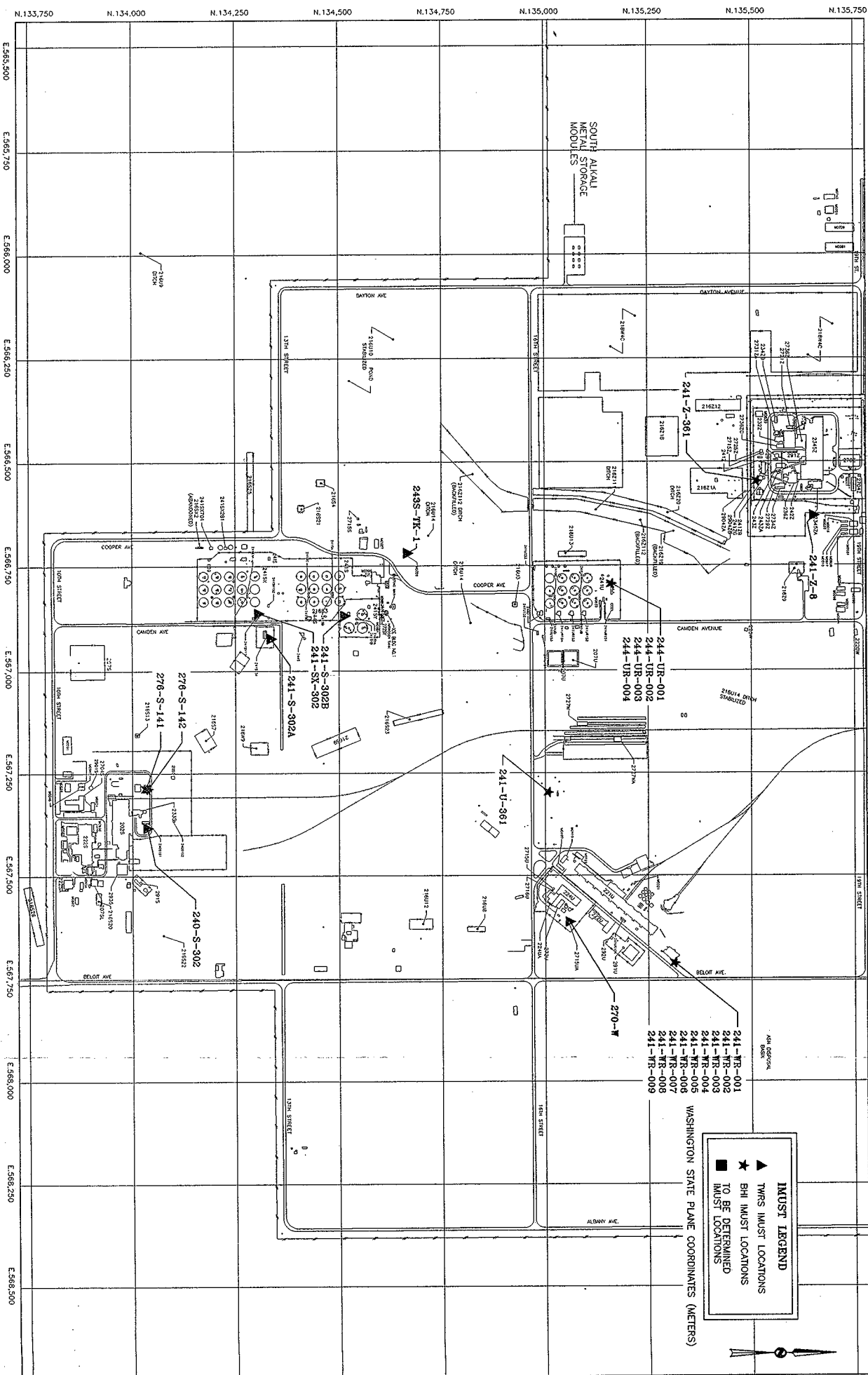
FLUOR DANIEL NORTHWEST, INC.

DATE: 28/07/07

CUSTOMER: LMHC

TITLE: 200 WEST AVE. (NORTH)

MATCH LINE TO PAGE D-4 (C00FILE: 28/07/08)



IMUST LEGEND

- ▲ TWRS IMUST LOCATIONS
- ★ BH IMUST LOCATIONS
- TO BE DETERMINED IMUST LOCATIONS

WASHINGTON STATE PLANE COORDINATES (METERS)

NOTE: THIS MAP IS FOR REFERENCE ONLY. DO NOT

FLUOR DANIEL NORTHWEST, INC.

CABLE: ZR870708

CUSTOMER: LWHC

TITLE: 200 WEST AREA (SOUTH)

DISTRIBUTION SHEET

To	From	Page 1 of 2
Distribution	C. H. Brevick	Date 11/25/97
Letter Report Title/Task Order		EDT No. 622781
200-Area Plateau IMUST Locations/L-02-41		ECN No.

Name	MSI N	Text With All Attac h.	Text Only	Attach. / Append ix Only	EDT/E CN Only
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U. S. Department of Energy Richland Operations Office

* R. G. Harwood	S7-54	X			
* H. J. Stafford	S7-53	X			
* J. F. Thompson	S7-54	X			
* D. D. Wodrich	S7-50	X			

DE&S Hanford, Inc.

* W. M. Funderburke	R2-38	X			
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* G. D. Johnson	S7-14	X			
* E. J. Lipke	R1-49	X			

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* D. J. Washenfelder	S7-40	X			
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* C. H. Brevick	E6-08	X (5)			
* J. D. Cummings	B4-57	X			
* L. A. Gaddis	H5-57	X			
* L. E. Hall	E6-14	X			
* R. L. Newell	E6-07	X			
* B. L. Nielsen	E6-14	X			
* S. F. Rush	E6-14	X			
* R. T. Steen	B4-57	X			
* R. B. Torres	E6-14	X			
* E. A. Vickery	E6-08	X			
* L. A. Watson	E6-14	X			
* J. C. Williams	E6-08	X			
* J. R. Zimmerman	E6-63	X			
* LMHC Project Files	B4-57	X			

Lockheed Martin Hanford Corporation

* H. L. Boston	G3-21	X			
* C. B. Bryan	T4-07	X			
* M. P. Delozier	R2-50	X			
* M. L. Dexter	R1-51	X			

* B. G. Erlandson	R1-51	X
* R. D. Gustavson	R2-33	X (5)
* B. M. Hanlon	T4-08	X
* T. J. Kelley	S5-07	X
* N. W. Kirch	R2-11	X
* M. A. Payne	S7-84	X
* R. P. Raven	R1-51	X
* C. J. Rice	R2-50	X
* W. E. Ross	S7-84	X
* J. N. Strode	R2-11	X
* A. E. Young	R1-10	X

Numatec Hanford Corporation
* E. A. Fredenburg

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