

Shielded Analytical Laboratory (SAL) Hot Cell Clean-out

Hot Cell Clean-out Using the Houdini Tracked Robot

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SAL Hot Cell Clean-out

Hot Cell clean-out project to remove 64 ft³ of highly radioactive mixed waste conducted within the Radiochemical Processing Laboratory (RPL) located in the 325 Building, 300 Area, Hanford Site between July 12, 2004 and September 30, 2004. The activity was completed well below the initial dose estimate of *3,850 person mRem for a total collective dose of *570 person mRem.

- * Estimate included possible recovery from an upset condition
- * 15% of the ALARA goal

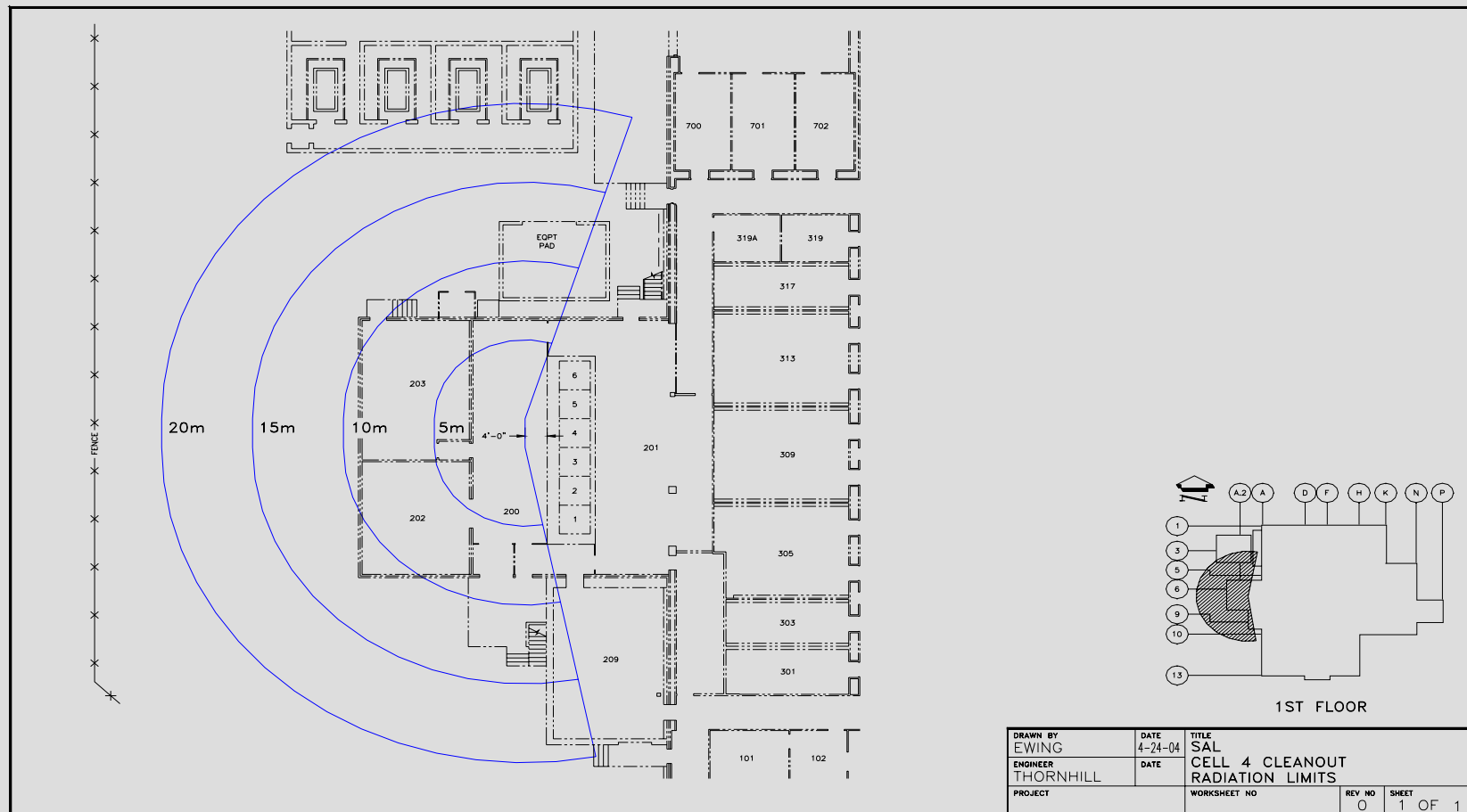
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Presentation Outline

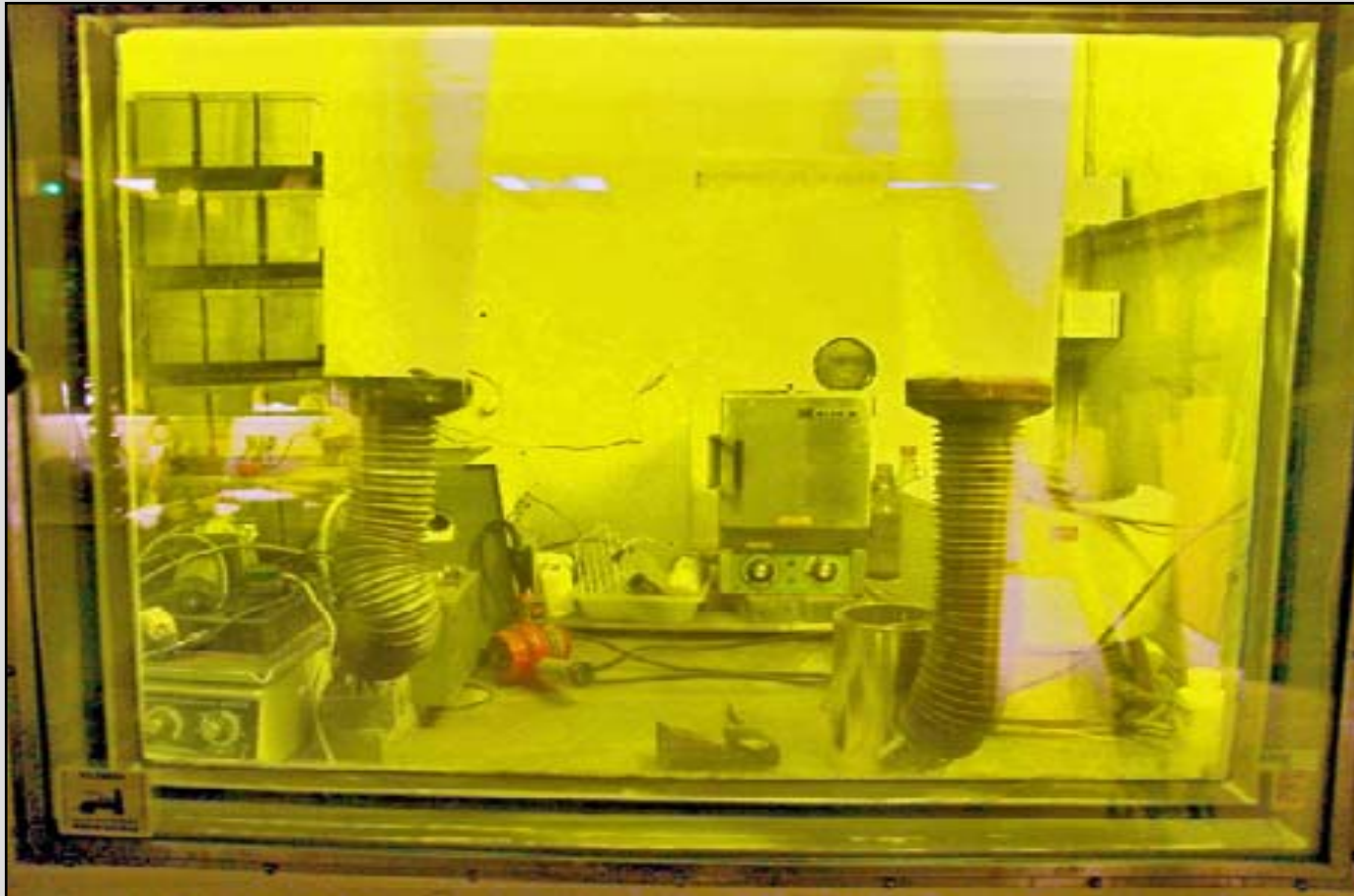
- ▶ Hot Cell History
- ▶ Waste Characterization
- ▶ Robot/Track Assembly
- ▶ Containment
- ▶ Waste Load-out Process
- ▶ Recover Shielded Waste Box
from Containment
- ▶ Conclusion
- ▶ Q and A

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Overhead view of 325B Annex and SAL



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Hot Cell #4 Before Waste Load-out

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Hot Cell #6 Before Waste Load-out

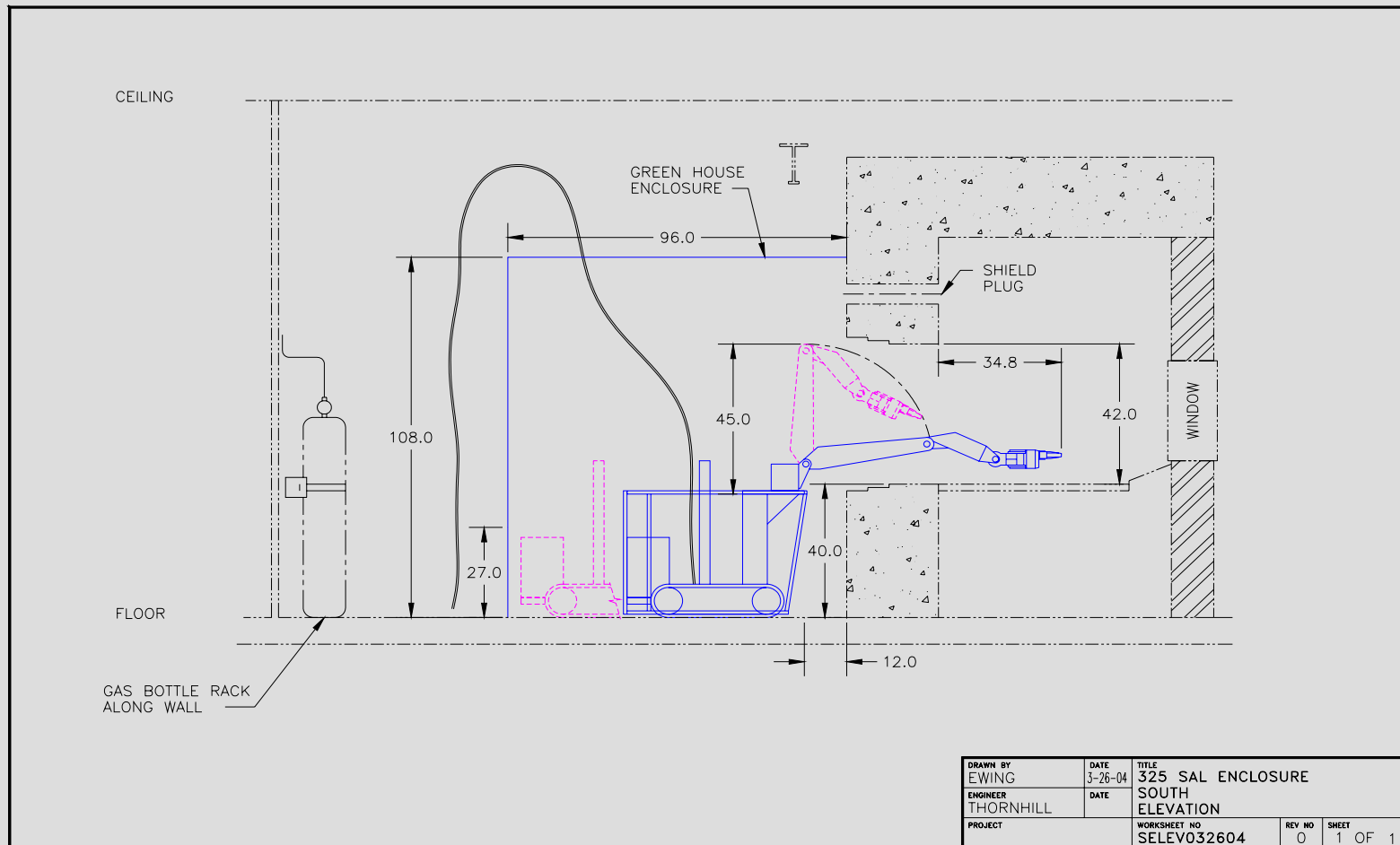
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Houdini Track and Predator Manipulator System



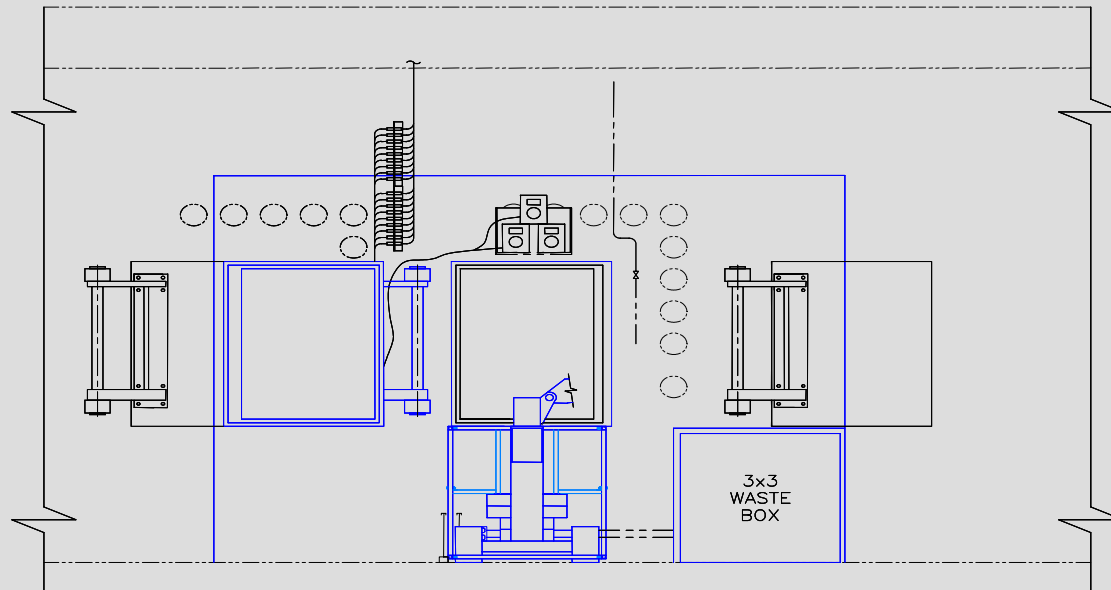
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Cutaway View of Robot in Containment and SAL Interface



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SAL Rear Face View of Robot & Containment



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ENGINEER THORNHILL	DATE	WEST ELEVATION	0	1 OF 1
PROJECT		WORKSHEET NO WELEV032604		