FIGURE 2.3
SHELDED CELL LAYOUT SECTIONS.
SURFACE MODULAR VAULT.

(SHEET 2 OF 2)
13. TRANSFER SEALED MODULE CANISTER BACK INTO MAIN CELL

14. LOWER LIDDED, SEALED MODULE CANISTER INTO MODULE TRANSFER FLASK

15. TRANSFER CANISTER MODULE TRANSFER FLASK FROM PROCESSING BUILDING TO STORE TUNNEL

16. POSITION MODULE TRANSFER FLASK AND BOGE BELOW SMV CANISTER HANDLING MACHINE

17. MODULE CANISTER VAULT STORAGE TUBE READY FOR LOADING

18. LOAD MODULE CANISTER INTO STORAGE TUBE USING CANISTER HANDLING MACHINE (CHM)

19. REPEAT MODULE CANISTER PRODUCTION OPERATIONS & TRANSFER MODULE FLASK & BOGE TO STORAGE VAULT

20. LOAD SECOND MODULE CANISTER INTO STORAGE TUBE USING CANISTER HANDLING MACHINE

21. REINSTALL STORAGE TUBE SHIELD PLUG IN STORAGE TUBE AND INSTALL STORAGE TUBE COVER PLATE

FIGURE 2.10 (SHEET 2 OF 2)
SEQUENCE DIAGRAM
SURFACE MODULAR VAULT MODULE OPERATIONS
1. BASKET TRANSPORTATION CASK RECEIVED AT CES FACILITY

2. REMOVE CASK FROM TRANSPORT VEHICLE AND LOAD INTO BASKET CASK BOGIE USING PROCESSING BUILDING CRANE

3. TRANSFER BASKET CASK BELOW SHIELDED CELL READY FOR BASKET TRANSFERS

4. TRANSFER BASKETS (QUANTITY 3) FROM TRANSPORTATION CASK AND PARK IN SHIELDED CELL

5. LOAD EMPTY TRANSPORTATION CASK ONTO TRANSPORT VEHICLE FOR RETURN TO REACTOR SITE

6. MOVE BASKET TO TRANSFER POSITION USING CRANE, OPEN ROOF & FLASK GAMMA GATES & WINCH BASKET INTO BASKET TRANSFER FLASK

7. WHEN BASKET IS LOADED INTO TRANSFER FLASK CLOSE BOTH GAMMA GATES

8. BASKET TRANSFER FLASK BOGIE POSITION LOADED TRANSFER FLASK INTO TRANSFER BOGIE, BASKET TRANSFER FLASK BOGIE IS THEN SHUNTED BY MODULE CANISTER TRANSFER FLASK BOGIE AND SENT TO THE STORE

9. INSTALL CHARGE FACE GAMMA GATE ON DUTY VAULT LINER

10. OPEN CHARGE FACE GAMMA GATE, AND RAISE STORAGE TUBE SHIELD PLUG INTO SHIELD PLUG HOUSING

11. CLOSE CHARGE FACE GAMMA GATE AND PARK SHIELD PLUG HOUSING ADJACENT TO DUTY STORAGE TUBE

12. USING STORAGE VAULT CRANE, TRANSFER BASKET TRANSFER FLASK THROUGH HATCH

**FIGURE 2.11 (SHEET 1 OF 2)**

SEQUENCE DIAGRAM

SURFACE MODULAR VAULT BASKET OPERATIONS
13. INSTALL BASKET TRANSFER FLASK ONTO CHARGE FACE GAMMA GATE

14. LOWER FUEL BASKET INTO VAULT STORAGE TUBE

15. REPEAT BASKET LOADING OPERATIONS FOR FURTHER 9 BASKETS INTO STORAGE TUBE (10 BASKETS IN TOTAL). CLOSE GAMMA GATES

16. USING VAULT CRANE, REMOVE BASKET TRANSFER FLASK FROM CHARGE FACE AND LOWER THROUGH FLASK HATCH ONTO BASKET TRANSFER FLASK BOGIE. SEND BACK TO PROCESS BUILDING

17. REPLACE SHIELD PLUG HOUSING ONTO GAMMA GATE

18. INSTALL VAULT STORAGE TUBE SHIELD PLUG INTO LOADED STORAGE TUBE AND INSTALL COVER PLATE

FIGURE 2.11 (SHEET 2 OF 2)  
SEQUENCE DIAGRAM  
SURFACE MODULAR VAULT  
BASKET OPERATIONS