



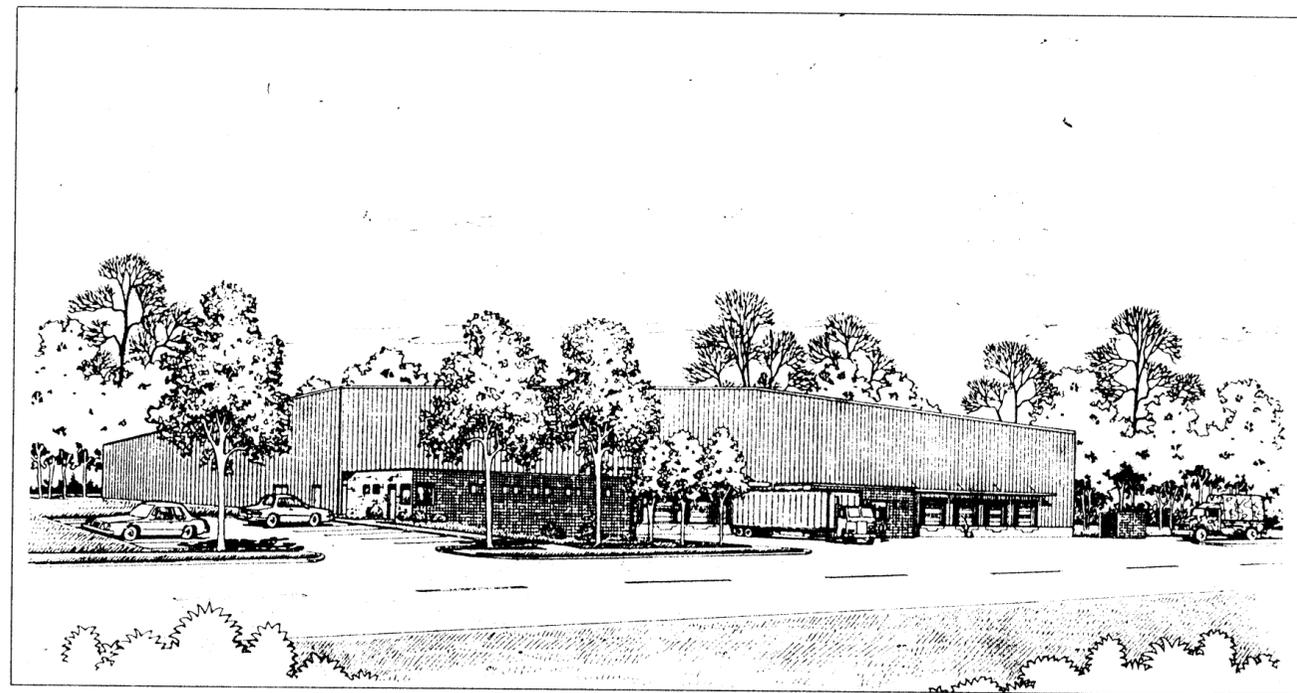
US Army Corps of Engineers
Norfolk District



US Army Troop Support Agency

STANDARD DEFINITIVE DESIGNS TROOP ISSUE SUBSISTENCE ACTIVITY

TISA COLD/DRY STORAGE FACILITIES



THIS STANDARD DEFINITIVE DESIGN PACKAGE HAS BEEN DEVELOPED AS A GUIDE FOR DESIGN OF SMALL, MEDIUM AND LARGE TROOP ISSUE SUBSISTENCE ACTIVITIES "TISA" COLD/DRY STORAGE FACILITIES THROUGHOUT THE CONTINENTAL UNITED STATES (CONUS). THE FOLLOWING UNIQUE FUNCTIONAL AND TECHNICAL REQUIREMENTS MUST BE CONSIDERED FOR ADAPTION OF THIS STANDARD OUTSIDE CONTINENTAL UNITED STATES (OCONUS):

- EXTERIOR LIGHTING FOR ADMINISTRATIVE AND BREAKROOM AREAS
- EXTERNAL FORKLIFT CHARGING STATION
- EXTERNAL HOOK-UP FOR REEFER VANS
- BELOW GRADE SPRINKLER WATER STORAGE
- RAILROAD SPURS
- DOCK CONFIGURATION FOR SIDE LOADING/UNLOADING
- ALTERNATE WARTIME USES

THE PURPOSE OF THIS DESIGN PACKAGE IS TO PROVIDE STANDARD FUNCTIONAL LAYOUTS AND CRITERIA FOR SIZING TISA COLD/DRY STORAGE FACILITIES FOR THE DEPARTMENT OF THE ARMY FACILITIES STANDARDIZATION PROGRAM. THE SPECIFIC SIZING CRITERIA AND PROCESS IS INCLUDED TO AID IN THE PREPARATION OF DD FORM 1391. IN ADDITION THIS PACKAGE SERVES AS A GUIDE TO MILITARY DESIGN AGENCIES AND A/E FIRMS IN THE APPLICATION OF THE DESIGN TO A SPECIFIC PROJECT.

THE PROCESS AND CRITERIA FOR SIZING HAVE BEEN DEVELOPED TO DETERMINE THE OVERALL STORAGE REQUIREMENTS BASED ON THE INSTALLATIONS CATEGORIES OF TROOP STRENGTH. AN EXAMPLE OF THIS PROCESS IS INCLUDED IN THE REVIEW AND ANALYSIS DOCUMENT. THE OVERALL STORAGE REQUIREMENTS WILL BE DETERMINED BY THE INSTALLATION'S MASTER PLANNER AND TROOP ISSUE SUBSISTENCE OFFICER WITH ASSISTANCE FROM THE US ARMY TROOP SUPPORT AGENCY. THE INSTALLATION'S CALCULATED STORAGE REQUIREMENTS WILL BE VERIFIED BY THE MAJOR COMMAND AND TSA VIA SITE VISIT. TSA WILL UTILIZE THE VERIFIED STORAGE REQUIREMENTS TO DETERMINE SQUARE

FOOTAGE AND OPTIMUM FACILITY CONFIGURATION PRIOR TO PREPARATION OF DD FORM 1391 BY THE INSTALLATION. TSA'S INVOLVEMENT WILL EXTEND THROUGH THE CONCEPT PHASE OF DESIGN.

THE SMALL, MEDIUM AND LARGE SIZE FACILITIES IN THIS PACKAGE HAVE BEEN DEVELOPED BASED ON AVERAGE LEVELS OF TROOP STRENGTHS FOR EACH INDIVIDUAL CATEGORY. THE PLANS FURTHER REFLECT AN ORGANIZATIONAL CONCEPT WHICH ALLOWS FLEXIBILITY AND EXPANSION TO THE FACILITY. INTEGRAL AND MANDATORY ELEMENTS OF THIS DESIGN PACKAGE ARE THE STORAGE AID SYSTEMS AND MATERIAL HANDLING EQUIPMENT WHICH ARE ESSENTIAL TO A FUNCTIONAL WAREHOUSE ENTITY.

A SUMMARY OF THE MAJOR MANDATORY AND OPTIONAL ELEMENTS OF THIS DESIGN PACKAGE ARE LISTED AS FOLLOWS:

- | MANDATORY | OPTIONAL |
|---|---------------------------------|
| • FUNCTIONAL RELATIONSHIPS | • AISLE WIDTHS |
| • DATA TABLES | • MINI/MAXI MART FUNCTION |
| • PROCESS FOR SIZING | • REACH THROUGH OPTION AT |
| • DAYS OF SUPPLY (ALSO MINIMUM) | • MAXI MART AISLE |
| • NONCOMBUSTIBLE EXTERIOR ENVELOPE | • EXTERIOR ENVELOPE TYPE |
| • LOW TEMPERATURE STORAGE INTERIOR ENVELOPE | • OFFICE AREA WALL TYPES |
| • STORAGE AID SYSTEMS | • ENGINEERING SYSTEMS |
| • MATERIAL HANDLING EQUIPMENT | • MECHANICAL EQUIPMENT LOCATION |
| • SPRINKLER SYSTEMS | • EMERGENCY GENERATOR |
| • EMERGENCY GENERATOR HOOK-UP | |

THIS DEFINITIVE DESIGN PACKAGE HAS BEEN DEVELOPED AND REVIEWED WITH ASSISTANCE FROM THE US ARMY TROOP SUPPORT AGENCY, FORCES COMMAND, TRAINING AND DOCTRINE COMMAND, HEADQUARTERS - US ARMY CORPS OF ENGINEERS AND THE US ARMY CORPS OF ENGINEERS - NORFOLK DISTRICT.

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**WOLFBERG
ALVAREZ
AND
ASSOCIATES**
ARCHITECTURE • ENGINEERING
PLANNING • INTERIOR DESIGN

SOR/A

DESIGNED:	W/A & A	DEPARTMENT OF THE ARMY FACILITIES STANDARDIZATION PROGRAM DEFINITIVE DESIGN
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