
FACILITIES SCHEDULE OVERVIEW STATUS

NSF PRESENTATION

MAY 22, 1995

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LIGO-G950029-00-F

OVERVIEW

- INTRODUCTION
- HIGHLIGHTS
- SCHEDULE ASSUMPTIONS
 - BASELINE
 - INTEGRATION
 - LINKAGES
 - STRATEGY
- DETAILED SCHEDULES
- MILESTONES
- ISSUES

INTRODUCTION

- FACILITIES COVERS FOUR MAJOR WBS ELEMENTS:
 - VACUUM EQUIPMENT
 - BEAM TUBE
 - BEAM TUBE ENCLOSURE
 - CIVIL CONSTRUCTION
- THE DETAILED STATUS FOR EACH OF THESE AREAS WILL BE DISCUSSED BY THE TASK LEADERS:
 - PROGRESS
 - COST, SCHEDULE, STATUS
 - ISSUES

HIGHLIGHTS

- TWO CONTRACTS FOR THE VACUUM EQUIPMENT PRELIMINARY DESIGN ARE IN PROGRESS, THE DOWN-SELECTION IS SCHEDULED FOR JULY 1995
- THE BEAM TUBE DESIGN AND QUALIFICATION TEST HAS BEEN COMPLETED, A CONTRACT FOR THE FABRICATION/INSTALLATION IS SCHEDULED FOR OCTOBER

HIGHLIGHTS

- THE BEAM TUBE ENCLOSURE DESIGN IS IN PROGRESS, FINE GRADING IN WASHINGTON IS SCHEDULED TO COMMENCE THIS FALL
- THE 90 % FACILITY DESIGN HAS BEEN COMPLETED AND TRADE STUDIES ARE UNDER WAY, DETAILED DESIGN IS SCHEDULED TO START NEXT MONTH

SCHEDULE BASELINE

- THE PREVIOUSLY USED “AUTO PLAN-2” SCHEDULING PROGRAM HAS BEEN REPLACED
- ALL LIGO SCHEDULES PRESENTED THE PAST REVIEWS HAVE BEEN TRANSFERRED AND ARE NOW MAINTAINED ON A COMMON SYSTEM “OPEN PLAN”
- ALL SCHEDULES HAVE BEEN UPDATED AND REFLECT THE STATUS AS OF MARCH 31, 1995
- TIME PHASING FOR THE “COBRA” RESOURCES ARE BASED ON “OPEN PLAN” SCHEDULES

INTEGRATION WITH DETECTOR

- THE FACILITY AND DETECTOR SCHEDULES ARE LINKED:
 - FOUR POINTS OF INTERSECTS, CONSTRAINED EXTERNALLY TO BOTH SCHEDULES (PROJECT MANAGEMENT PLAN LEVEL 1 MILESTONES)
- JOINT OCCUPANCY (WA - 9/97, LA - 3/98)
 - THE LVEA IS COMPLETED; THE VACUUM EQUIPMENT INSTALLATION STARTS; THE CONTROLS & DATA GROUP STARTS INSTALLATION OF CABLES
- COMPLETE FACILITY SHAKEDOWN (WA - 7/98, LA - 1/99)
 - ALL FACILITIES, BEAM TUB, VAC EQ ARE OPERATIONAL ;THE DETECTOR INSTALLATION IS STARTING

CRITICAL PATH

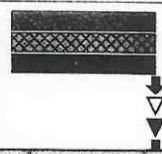
- MOST OF THE FACILITIES ACTIVITIES ARE ON OR NEAR THE CRITICAL PATH
 - THE MAXIMUM SCHEDULE FLOAT IS TYPICALLY 30-50 DAYS
 - EXCEPTIONS ARE THE WASHINGTON BEAM TUBE TASKS WHICH ARE 3-4 MONTHS
- THE COMPLETION OF THE LOUISIANA CONSTRUCTION PHASE IS BEHIND SCHEDULE
 - SITE ACQUISITION AND CLEARANCE WERE DELAYED
 - SETTLEMENT TIME REQUIRED BEFORE CONSTRUCTION IS AT BARE MINIMUM
 - SITE CHARACTERISTICS SUCH AS INCLEMENT WEATHER MAY CAUSE FURTHER SCHEDULE DELAYS

FACILITY SCHEDULE OVERVIEW

- THE SCHEDULE FULLY INTEGRATES AND LINKS ALL OF THE WBS 1.1 ACTIVITIES:
 - WBS 1.1.1 VACUUM EQUIPMENT
 - WBS 1.1.2 BEAM TUBE
 - WBS 1.1.3 BEAM TUBE ENCLOSURE
 - WBS 1.1.4 CIVIL CONSTRUCTION
- SUMMARY SCHEDULES PRESENTED HERE ARE SIMPLIFIED:
 - THEY DO NOT SHOW INTERCONNECTING LINKS
 - THEY DO NOT INDICATE FLOAT
 - THEY DO NOT SHOW LEVEL OF EFFORT TASKS

Start: 04/01/95
 Finish: 04/01/95
 Time Now: 04/01/95
 Project: FAC-BREF
 Run: 05/04/95
 Page: 1 of 2

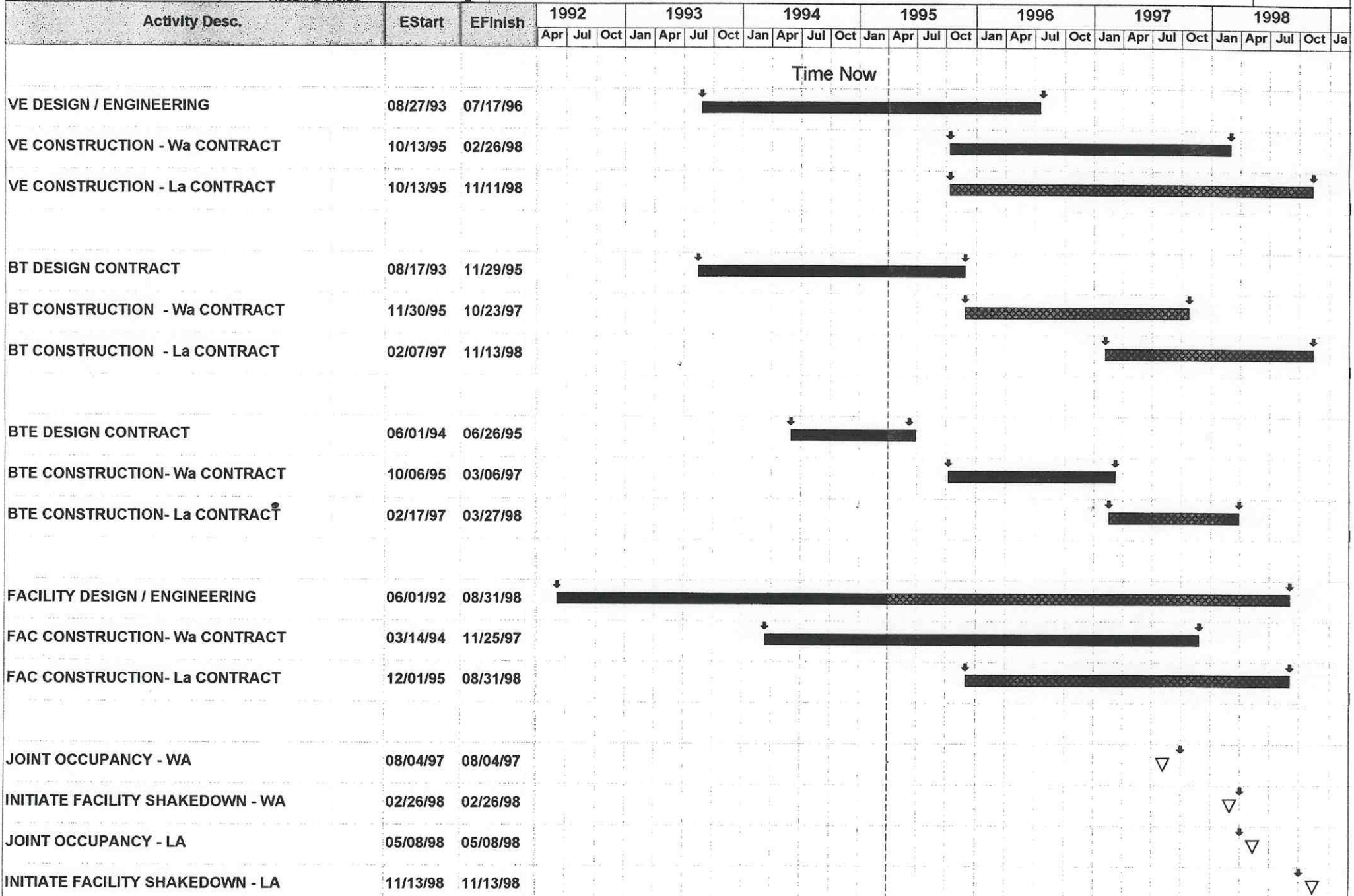
Planned
 Critical
 Actual Dates
 Milestone-Baseline
 Milestone-Planned
 Milestone-Completed
 Baseline Dates



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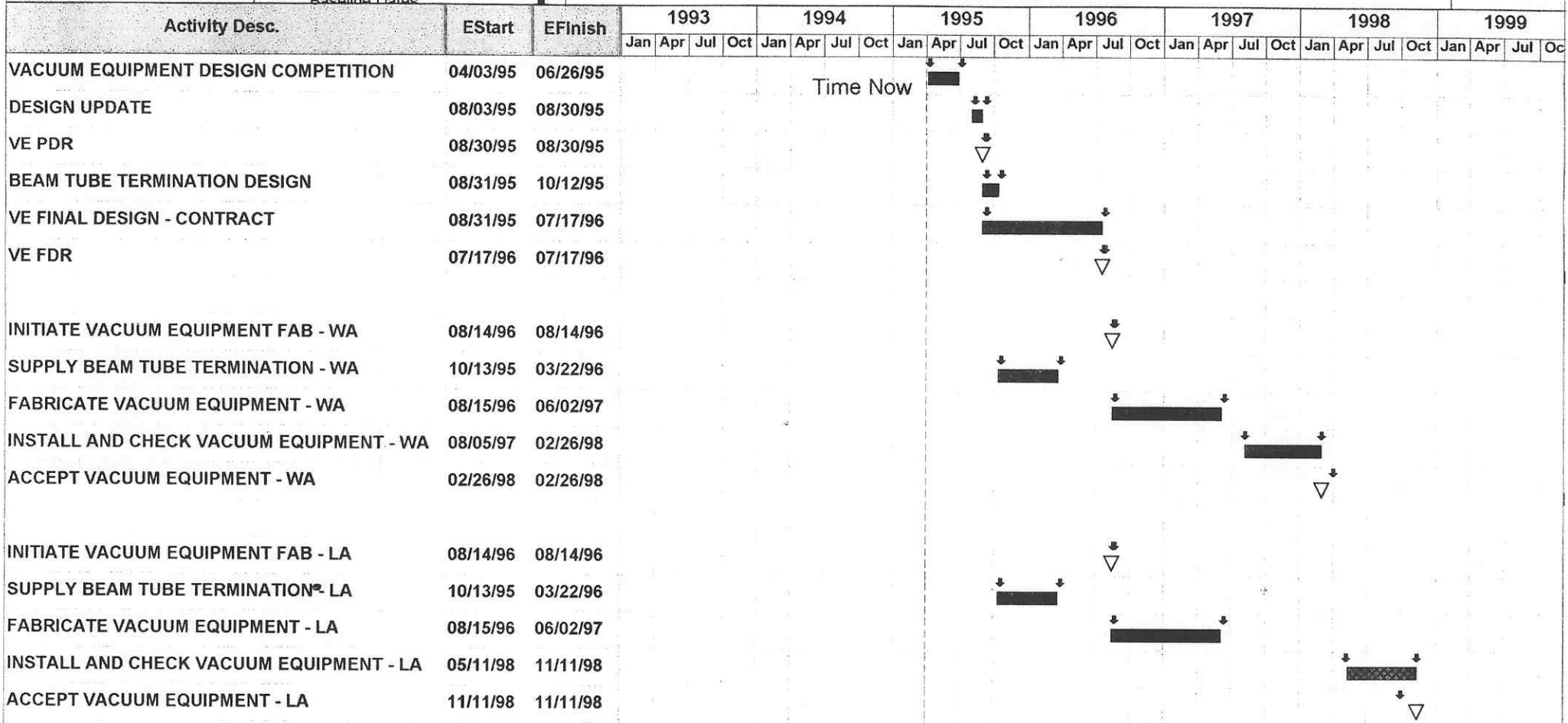
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 Page: 1 of 1

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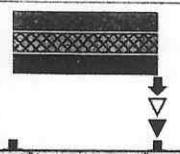
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 LIGO Project
 LIGO Project Facilities
 Integrated Project Schedule (IPS)
 Vacuum Equipment Design & Fabrication
 Open Plan Professional by Welcom Software



Time Now

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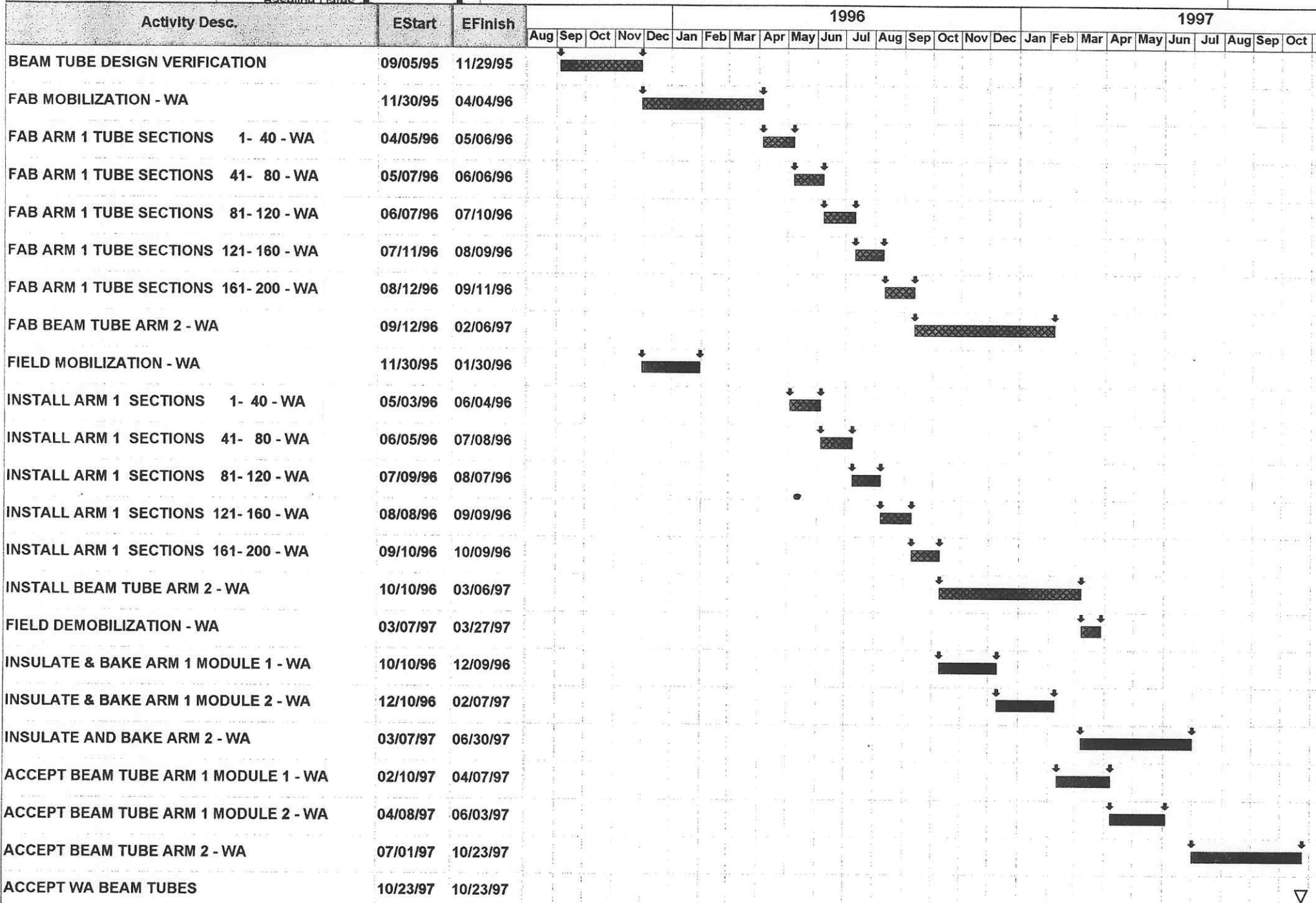
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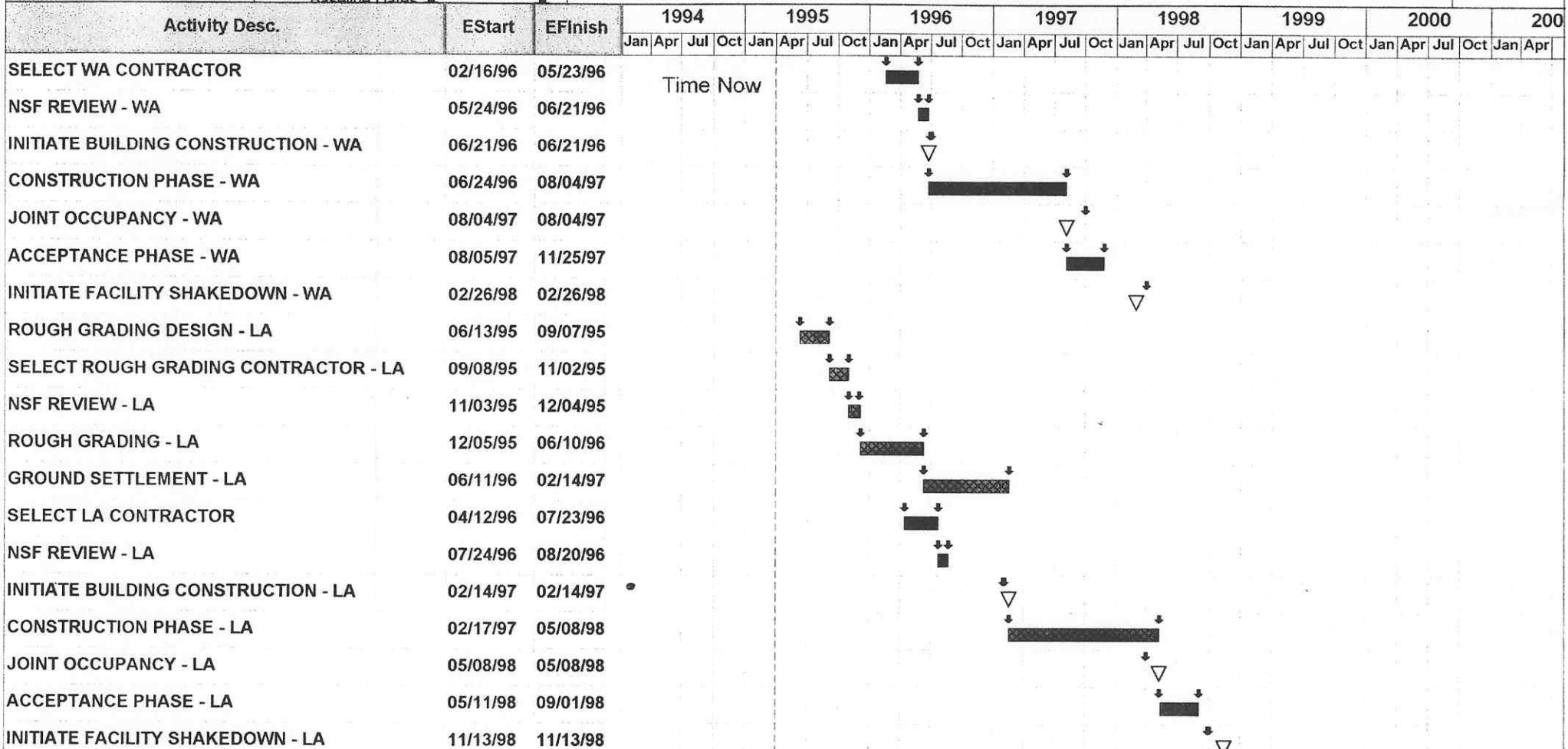
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FACILITIES STATUS

- **PROGRESS SINCE LAST REVIEW**

- BEAM TUBE DESIGN IS COMPLETE, FINAL DESIGN PACKAGE HAS BEEN RECEIVED
- BEAM TUBE HAS SUCCESSFULLY PASSED THE QUALIFICATION TEST
- PROCUREMENT STRATEGY FOR BEAM TUBE HAS BEEN SET
- DESIGN ACTIVITIES ARE UNDER WAY IN ALL CRITICAL AREAS

- **SCHEDULE**

- WASHINGTON SITE IS ON SCHEDULE (MINIMAL FLOAT)
- LOUISIANA SITE IS BEHIND SCHEDULE (1-2 MONTHS)

- **COST**

- COST CONTAINMENT FOR ALL AREAS OF THE FACILITIES IS A PRIMARY CONCERN