

**T960129-00-P**

**DCC Document Listing**

29-Jul-96

| Document No  | Full Name           | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|---------------------|-----------------|----------|--|
| C920001-00-M |                     |                 | 5/8/92   | Cooperative Agreement PHY-9210038 between CIT and NSF  |
| C920001-01-M | Karen Sandberg      |                 | 8/19/93  | Cooperative Agreement No. PHY-9210038 Amendment No. 01 Between the California Institute of Technology and the National Science Foundation                                  |
| C920001-02-M | Aaron R. Asrael     |                 | 3/8/94   | Cooperative Agreement No. PHY-9210038 Amendment No. 02 Between the California Institute of Technology and the National Science Foundation                                  |
| C920001-03-M | Karen Sandberg      |                 | 5/9/94   | Cooperative Agreement No. PHY-9210038 Amendment No. 03 Between the California Institute of Technology and the National Science Foundation(Further Revision Made on 1/9/95) |
| C920001-04-M | Karen Sandberg      |                 | 9/2/94   | Cooperative Agreement No. PHY-9210038 Amendment No. 04 Between the California Institute of Technology and The National Science Foundation                                  |
| C920001-05-M | Karen Sandberg      |                 | 4/20/95  | Cooperative Agreement No. PHY-9210038 Amendment No. 05 Between the California Institute of Technology and the National Science Foundation                                  |
| C920001-06-M | Aaron R. Asrael     |                 | 7/13/95  | Cooperative Agreement No. PHY-9210038 Amendment No. 06 Between the California Institute of Technology and the National Science Foundation                                  |
| C920001-07-M | Karen Sandberg      |                 | 1/19/96  | Cooperative Agreement No. PHY-9210038 Amendment No. 07 Between California Institute of Technology and National Science Foundation  |
| C920001-08-M | Aaron R. Asrael     |                 | 5/13/96  | Amendment 08 for Cooperative Agreement PHY-9210038   |
| C920001-09-M | Karen Sandberg      |                 | 3/18/96  | Cooperative Agreement No. PHY-9210038 Amendment No. 09 Between California Institute of Technology and National Science Foundation  |
| C920001-10-M | Karen Sandberg      |                 | 6/20/96  | Cooperative Agreement No. PHY-9210038 Amendment No. 10 Between California Institute of Technology and National Science Foundation  |
| C920005-00-B | Mary Humphrey       |                 | 9/11/92  | Request for Proposal (RFP) #MH-146 for LIGO Beam Tube Modules  |
| C930001-00-O | Gerry Stapfer       |                 | 9/14/93  | Selection of an AE/EC Contractor   |
| C930002-00-B | Larry Jones         |                 | 8/16/93  | Firm-Fixed Price Contract, P.O. PP108027 (#C146) with CBI for Beam Tube Modules (SIGNED original)  |
| C930002-01-B | Larry Jones         |                 | 6/8/94   | Change Order #1 for P.O. PP108027 with CBI   |
| C930002-02-B | Larry Jones         |                 | 11/3/94  | Change Order #2 for P.O. PP108027 with CBI for Additional Tasks  |
| C930003-00-B | Jon Hagstrom        |                 | 8/17/93  | Return of Signed Contract #C146 (P.O. PP108027) with CBI   |
| C930004-00-B | Marty Tellalian     |                 | 8/23/93  | CBI/CIT Systems Requirement Review Revised Meeting Agenda, 24-25 August 1993   |
| C930005-00-B | Marty Tellalian     |                 | 8/19/93  | CBI/CIT Systems Requirement Review Meeting Agenda, 24-25 August 1993, DRAFT  |
| C930006-00-B | Larry Jones         |                 | 9/3/93   | Confirmation for Beam Tube Module System Requirements Review in Plainfield, 28 September 1993  |
| C930007-00-B | Marty Tellalian     |                 | 9/13/93  | CBI/CIT Systems Requirement Review Meeting Agenda, 28 September 1993, DRAFT  |
| C930008-00-B | Marty Tellalian     |                 | 9/29/93  | Action Items from Systems Requirements Review Meeting of 28 September 1993   |
| C930009-00-B | Marty Tellalian     |                 | 9/30/93  | TDM #1 Response - Baffle Modifications   |
| C930010-00-B | Larry Jones         |                 | 10/1/93  | Markup of Action Items from SRR of 28 September 1993   |
| C930011-00-B | Marty Tellalian     |                 | 10/1/93  | SRR Meeting Minutes of September 28, 1993 - DRAFT  |
| C930012-00-B | Marty Tellalian     |                 | 11/1/93  | Additional Action Item Listing for 2nd Project Review Data Package   |
| C930013-00-B | Larry Jones         |                 | 10/19/93 | Beam Tube Module PDR Subjects, DRAFT   |
| C930014-00-B | Marty Tellalian     |                 | 11/8/93  | Draft PDR Meeting Outline for 30 November - 1 December 1993  |
| C930015-00-B | Marty Tellalian     |                 | 11/8/93  | Viewgraph Examples of the Fabrication and Construction for PDR, 30 November - 1 December 1993  |
| C930016-00-B | Larry Jones         |                 | 11/12/93 | Pre-Qualification Tube Inspection and Tasks (sent to Rick Prior -MWG, Houston Welding)   |
| C930017-00-B | Marty Tellalian     |                 | 11/12/93 | Beam Tube Module Preliminary Design Review (PDR) Agenda, 30 November - 1 December 1993, DRAFT  |
| C930018-00-B | Larry Jones         |                 | 11/16/93 | Review Board Charter and Preliminary Agenda for PDR on 30 November - 1 December 1993, DRAFT  |
| C930019-00-B | Marty Tellalian     |                 | 11/19/93 | Preliminary Design Review (PDR) Agenda, 30 November - 1 December 1993, DRAFT   |
| C930020-00-B | Marty Tellalian     |                 | 11/28/93 | Preliminary Design Review (PDR) Agenda, 30 November - 1 December 1993, Revised   |
| C930021-00-B | Larry Jones         |                 | 12/2/93  | Proposed Shear and Weld Sequencing   |
| C930022-00-B | Larry Jones         |                 | 12/2/93  | Supply Availability for Wrapped Coupons  |
| C930023-00-B | Marty Tellalian     |                 | 12/10/93 | Livingston Site Survey of 7 December 1993  |
| C930024-00-B | Marty Tellalian     |                 | 12/15/93 | Draft letter for Contract Change Requesting Additional Weld Procedure Development - CBI WBS Change Number 710  |
| C930025-00-B | Marty Tellalian     |                 | 12/27/93 | Request for Change to Build the Option Outgas Test Facility, DRAFT   |
| C930026-00-B | Marty Tellalian     |                 | 12/20/93 | Beam Tube Support Reactions at Foundation Level  |
| C930027-00-B | Marty Tellalian     |                 | 12/6/93  | Meeting Agenda for 8 December 1993   |
| C930028-00-B | Ken Flessas         |                 | 12/6/93  | LIGO Team Member-Communication Chart   |
| C930029-00-B | Larry Jones         |                 | 9/27/93  | Response to CDRL submittal of the Project Control Plan, Draft (CDRL 01, DRD 01) and the Documentation Control Plan, Draft (CDRL 05, DRD 02) dated 16 September 1993        |
| C930030-00-B | Larry Jones         |                 | 9/28/93  | Presentation Viewgraphs of Preliminary Comments and Feedback to CBI on Draft Project Control Plan and Draft Documentation Control Plan, 28 September 1993                  |
| C930031-00-B | Larry Jones         |                 | 11/12/93 | Response to 2nd Draft Submittals of the Project Control Plan (CDRL 01, DRD 01) and the Documentation Control Plan (CDRL 05, DRD 02), dated 12 November 1993                |
| C930032-00-O | Dames & Moore       |                 | 2/10/93  | Report of Geotechnical Survey for Hanford, WA - dated 10 February 1993   |
| C930034-03-P | Ed Jasnow           |                 | 1/12/96  | Change Order #3 to P.O. PP112285 with U.S. Department of Energy  |
| C930035-00-O | Steve Hunter        |                 | 11/4/93  | Cost Breakdown to Provide Service to the Ligo Project  |
| C930036-00-O | Steve Hunter        |                 | 10/14/93 | Providing Electrical Power Service to the Ligo Project   |
| C930037-00-O | Stephen R. Anderson |                 | 11/10/93 | Change of Existing Overhead Primary Facilities to Underground Primary Facilities   |
| C940001-00-O | Gerry Stapfer       |                 | 5/27/94  | Approach and Steps to Get an A-E Firm on Board   |
| C940002-00-O |                     |                 | 4/25/94  | Commerce Business Daily Solicitation #0194 for A/E Firms, dated 5/20/95  |
| C940003-00-O | Gerry Stapfer       |                 | 10/27/94 | Presentation on Architect-Engineer Selection Criteria and Results, 27 October 1994   |

| Document No  | Full Name                     | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------------|-----------------|----------|---|
| C940004-00-O | Gerry Stapfer                 |                 | 7/21/94  | Denial of Inclusion on List to Receive a Request for Proposal (RFP) for LIGO A/E Services                                 |
| C940005-00-O | Gerry Stapfer                 |                 | 7/21/94  | Selected to Receive Solicitation for Proposal in Response to Solicitation #0194 for LIGO A/E Services                     |
| C940006-00-O | Cindy Akutagawa               |                 | 5/20/94  | List of Companies Selected to Submit Proposals in Response to Solicitation #0194 for A/E Services                         |
| C940007-00-O | California Institute of Tech. |                 |          | Evaluations of Selected Companies Qualifications for A/E Services   |
| C940008-00-O | Fred Asiri                    |                 | 7/14/94  | Presentation on Architect-Engineer Selection Process and Results, dated 14 July 1994                                      |
| C940008-00-O | Irena Petrac                  |                 | 7/14/94  | Presentation on Architect-Engineer Selection Process and Results, dated 14 July 1994                                      |
| C940009-00-O | Gerry Stapfer                 |                 | 6/27/94  | A-E Review Panel Meeting, 14 July 1994  |
| C940010-00-O | Gerry Stapfer                 |                 | 6/20/94  | Participation on A-E Review Panel for 14 July 1994  |
| C940011-00-O | Gerry Stapfer                 |                 | 7/14/94  | A-E Review Panel Report/Minutes of 14 July 1994   |
| C940012-00-O | Gerry Stapfer                 |                 | 7/19/94  | A-E Review Panel Meeting Package (Agenda, Objectives, Summary) of 14 July 1994  |
| C940013-00-O | Gerry Stapfer                 |                 | 9/26/94  | A-E Review Panel Meeting Agenda (Preliminary) for 27 October 1994   |
| C940014-00-O | Gerry Stapfer                 |                 |          | A-E Review Panel Meeting Agenda for 27 October 1994   |
| C940015-00-O |                               |                 | 11/4/94  | A-E Review Panel Meeting Travel/Expense Reimbursements  |
| C940016-00-O | Gerry Stapfer                 |                 | 10/31/94 | A-E Review Panel Report for 27 October 1994 Meeting   |
| C940017-00-O | Barry Barish                  |                 | 8/22/94  | Information copy of Request for Proposal (RFP) for LIGO Facility Design and Construction Management Support               |
| C940018-00-O | Yasmin Merali                 |                 | 8/15/94  | Transmittal of Request for Proposal (RFP) #YM 193 for Facilities Design and Construction Management Support               |
| C940019-00-O | Yasmin Merali                 |                 | 9/7/94   | Addendum #1 to Request for Proposal (RFP) #YM 193 - Additional Information  |
| C940020-00-O | Yasmin Merali                 |                 | 8/15/94  | Transmittal of Request for Proposal (RFP) #YM 193 - Facilities Design and Construction Management Support                 |
| C940021-00-O | Yasmin Merali                 |                 | 9/7/94   | Addendum #1 to RFP #YM 193 - Additional Information   |
| C940022-00-O | Yasmin Merali                 |                 | 8/15/94  | Transmittal of Request for Proposal (RFP) #YM 193 - Facilities Design and Construction Management Support                 |
| C940023-00-O | Yasmin Merali                 |                 | 9/7/94   | Addendum #1 to RFP #YM 193 - Additional Information   |
| C940024-00-O | Michael S. Hayner             |                 | 8/22/94  | Confirmation of Intent to Submit a Proposal for RFP YM 193  |
| C940025-00-O | Irena Petrac                  |                 | 9/13/94  | Bechtel's Input to Questions on LIGO RFP #YM 193  |
| C940026-00-O | Yasmin Merali                 |                 | 8/15/94  | Request for Proposal (RFP) #YM 193 - Facilities Design and Construction Management Support                                |
| C940027-00-O |                               |                 | 5/25/94  | Statement of Work for A/E Professional Services for Facility Design of LIGO, DRAFT  |
| C940028-00-O | Gerry Stapfer                 |                 | 8/26/94  | Agenda, Attendees, Questions for LIGO A-E Bidders Conference on August 26, 1994   |
| C940029-00-O | Fred Asiri                    |                 | 10/1/94  | Completed Evaluation Forms for Bechtel, DMJM, and Parsons   |
| C940029-00-O | P. Riegert                    |                 | 10/1/94  | Completed Evaluation Forms for Bechtel, DMJM, and Parsons   |
| C940030-00-O | Yasmin Merali                 |                 | 9/12/94  | Addendum #2 to RFP #YM 193 - Additional Information   |
| C940031-00-O | Irena Petrac                  |                 | 9/28/94  | Visit for Oral Discussions - scheduled for 11 October 1994  |
| C940032-00-O | Irena Petrac                  |                 | 10/6/94  | Agenda for Oral Discussions on 11 October 1994  |
| C940033-00-O | Yasmin Merali                 |                 | 9/12/94  | Addendum #2 to RFP #YM 193 - Additional Information   |
| C940034-00-O | Irena Petrac                  |                 | 9/28/94  | Visit for Oral Discussions - scheduled for 10 October 1994  |
| C940035-00-O | Irena Petrac                  |                 | 10/6/04  | Agenda for Oral Discussion - scheduled 10 October 1994  |
| C940036-00-O | Michael S. Hayner             |                 | 9/29/94  | Acknowledgement of Scheduled Oral Discussions and Map of Bechtel  |
| C940037-00-O | Irena Petrac                  |                 | 10/10/94 | Meeting Notes from Oral Discussion Held at Bechtel on 10 October 1994   |
| C940038-00-O | Yasmin Merali                 |                 | 9/12/94  | Addendum #2 to RFP #YM 193 - Additional Information   |
| C940039-00-O | Irena Petrac                  |                 | 9/28/94  | Visit for Oral Discussions - scheduled for 12 October 1994  |
| C940040-00-O | Irena Petrac                  |                 | 10/6/94  | Agenda for Oral Discussions on 12 October 1994  |
| C940041-00-O | Irena Petrac                  |                 | 10/12/94 | Meeting Notes from Oral Discussion held at DMJM on 12 October 1994  |
| C940042-00-O | Gerry Stapfer                 |                 | 11/8/94  | Selection of Architect-Engineer Presentation to A/e Source Selection Board  |
| C940043-00-O | Gary Sanders                  |                 | 10/28/94 | Final Report of the Architect-Engineer Evaluation Panel for LIGO FDCM   |
| C940044-00-O | Bill Althouse                 |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940044-00-O | Barry Barish                  |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940044-00-O | Gary Sanders                  |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940044-00-O | Sandy Pool                    |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940044-00-O | Fred Asiri                    |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940044-00-O | Gerry Stapfer                 |                 | 11/15/94 | Source Selection Report for Procurement for LIGO Facility Design and Construction Management Support, with Signature Page |
| C940045-00-V | Yasmin Merali                 |                 | 12/8/94  | Request for Proposal (RFP) #MH 178 - LIGO Vacuum Equipment  |
| C940046-00-O | Yasmin Merali                 |                 | 12/1/94  | Acknowledgement of Parsons as chosen A-E company  |
| C940047-00-O | Sven Svendsen                 |                 | 12/6/94  | Response to Debriefing on the Selection Process for FDCM Support for LIGO   |
| C940048-00-O | James A. Johnson              |                 | 7/28/94  | Request for Names of the Firms Selected to Receive the RFP #YM 193  |
| C940049-00-O | Debra Joan Barbour            |                 | 8/19/94  | Request for Debriefing  |
| C940050-00-O | Dan McKelvie                  |                 | 7/27/94  | Request for Debriefing  |
| C940051-00-O | Richard Forest                |                 | 9/22/94  | Request for Debriefing  |
| C940052-00-O | Irena Petrac                  |                 | 8/18/94  | Distribution List of RFP YM 193   |
| C940053-00-O |                               |                 | 8/10/94  | RFP #YM 193 Status and Schedule   |

| Document No  | Full Name           | ContractorDocNo  | Doc Dt   | Full Title  |
|--------------|---------------------|------------------|----------|---|
| C940054-00-O | Yasmin Merali       |                  | 12/1/94  | Acknowledgement of Parsons as Chosen A/E company  |
| C940055-00-P | Yasmin Merali       |                  | 11/28/94 | Request for Proposal (RFP) #YM 199 - Technology Demonstration of a Coating Process for LIGO Optics  |
| C940056-01-O |                     |                  | 11/1/94  | Geotechnical Investigation of the LIGO Site, DRAFT - Livingston, Louisiana  |
| C940056-A-O  |                     |                  | 1/1/95   | Geotechnical Investigation of the LIGO Site, FINAL - Livingston, Louisiana  |
| C940057-00-P | Karen Dowd          |                  | 1/18/95  | P.O. PC150969 with Ralph M. Parsons Company for Facilities Design and Construction Management Support at Livingston and Hanford (includes Concurrence document) |
| C940058-00-V | John Worden         |                  | 11/1/94  | Procurement Plan for the LIGO Vacuum Equipment, CALTECH DISCREET (previous document #11000130)  |
| C940059-00-O | Gerry Stapfer       |                  | 11/22/94 | Additional A/E Definitions for Parsons Contract, P.O. PP150969  |
| C940060-00-B | Marty Tellalian     |                  | 1/4/94   | Draft Request for Change to the Contract to Evaluate Alternative Cleaning Procedures  |
| C940061-00-B | Larry Jones         |                  | 1/4/94   | PDR Review Board Report, DRAFT (30 November - 1 December, 1993)   |
| C940062-00-B | Larry Jones         |                  | 2/2/94   | Alternative Beam Tube Section Cleaning  |
| C940063-00-B | Marty Tellalian     |                  | 1/31/94  | Project Schedule and FDR Meeting Date   |
| C940064-00-B | Larry Jones         |                  | 2/15/94  | Authorization to Proceed on Weld Coupons Made with Standard Weld Wire   |
| C940065-00-B | Steve Peters        | R-930212-002     | 2/16/94  | RFQ to Washington Steel Corp. for Stainless Steel Coils   |
| C940066-00-B | Marty Tellalian     |                  | 2/21/94  | 5th Monthly Review Meeting Action Items, DRAFT  |
| C940067-00-B | Marty Tellalian     |                  | 2/22/94  | Change Order Request for Procurement of a Full Sized Coil of Beam Tube Material for the Qualification Test  |
| C940068-00-B | Ken Flessas         |                  | 2/23/94  | Clarification of Labor Rates for Revised Budget Estimate for the Option Phase   |
| C940069-00-B | Charles Sherlock    |                  | 3/7/94   | Shipment of Plain and Welded Coupons  |
| C940070-00-B | Ken Flessas         |                  | 3/9/94   | ROM Estimate Summary  |
| C940071-00-B | Warren A. Carpenter |                  | 3/14/94  | Change Order Request for Independent Coupon Outgassing Test Facility  |
| C940071-01-B | Marty Tellalian     |                  | 3/22/94  | Change Order Request for Independent Coupon Outgassing Test Facility, Revision 1  |
| C940072-00-B | Warren A. Carpenter |                  | 3/14/94  | RGA Selection - Beam Tube Qualification Test  |
| C940073-00-B | Larry Jones         |                  | 3/15/94  | Proposed Agenda for 6th Monthly Review Meeting of 17 March 1994   |
| C940074-00-B | Marty Tellalian     |                  | 3/15/94  | 6th Monthly Review Meeting Agenda for 17 March 1994   |
| C940075-00-B | Marty Tellalian     |                  | 3/21/94  | Change Order Request for Purchase of Three Full Size Coils of Beam Tube Material for the Qualification Test, DRAFT  |
| C940076-00-B | Larry Jones         |                  | 3/22/94  | Current LIGO Contracts at Hanford Site  |
| C940077-00-B | Marty Tellalian     |                  | 3/25/94  | Change Order Request for Qualification Test I2R Bakeout   |
| C940078-00-B | Marty Tellalian     |                  | 4/12/94  | Preliminary Agenda for the Final Design Review (FDR) - 26 April 1994  |
| C940079-00-B | Marty Tellalian     |                  | 4/12/94  | Change Order Request for Additional Weld Wire Evaluation and Coupon Preparation   |
| C940080-00-B | Warren A. Carpenter |                  | 4/18/94  | Notes from GNB Meeting re. Gate Valve Quotations  |
| C940081-00-P | Richard Berglund    |                  | 3/30/94  | Memorandum of Understanding and Project Agreement between Caltech and the Central Washington Building and Construction Trade Council (SIGNED COPY)              |
| C940082-00-B | Paula Morgan        |                  | 4/22/94  | Qualification Test Final Design Review (FDR) Viewgraphs   |
| C940083-00-B | Marty Tellalian     |                  | 5/10/94  | Change Order Request for Additional Copies of Printed Materials for the PDR, FDR, and QTR, Draft  |
| C940084-00-B | Steve Peters        |                  | 5/10/94  | Estimate of Cost for Performing a Dry Air Bake of the QT Material at Metlab   |
| C940085-00-B | Larry Jones         |                  | 5/10/94  | Authorization to Scrap 24" dia. Beam Tubes  |
| C940086-00-B | Larry Jones         |                  | 5/10/94  | Authorization to Proceed with the Task of Purging the Coil Bake with Dry Air  |
| C940087-00-B | Marty Tellalian     | QAP, Rev. 0      | 5/13/94  | Quality Assurance Plan, Revision 0, pages 6 -12, DRAFT  |
| C940088-00-B | Marty Tellalian     |                  | 5/13/94  | Change Order Request for Weld Wire Cleaning Development & Implementation - Outgassing Characteristics of Welds Made with Clean Filler Material                  |
| C940088-01-B | Marty Tellalian     |                  | 5/13/94  | Request for Change for Weld Wire Cleaning Development & Implementation, Revised   |
| C940089-00-B | Marty Tellalian     |                  | 5/16/94  | Change Order Request for the Addition of Serrations to the Beam Tube Module Baffles   |
| C940090-00-B | Larry Jones         |                  | 5/17/94  | Authorization to Proceed with the Task of Preparing Weld Coupons for Validation of the Filler Wire Cleaning Process   |
| C940091-00-B | Marty Tellalian     |                  | 5/27/94  | Change Order Request for the Addition of Serrations to the Beam Tube Module Baffles, Revised  |
| C940091-01-B | Marty Tellalian     |                  | 5/27/94  | Baffle Serrations Request for Change Man-hours, Revised   |
| C940092-00-B | Marty Tellalian     |                  | 5/20/94  | Beam Tube Module Component Procurement and List of Selected Vendors for the Qualification Test  |
| C940093-00-B | Larry Jones         |                  | 5/20/94  | Approval of Draft Detailed Design of Priority Components  |
| C940094-00-B | Marty Tellalian     |                  | 5/23/94  | Baffle Serrations Design Man-hour Breakdown   |
| C940095-00-B | Larry Jones         |                  | 5/24/94  | Mill Test Data  |
| C940096-00-B | Rick Prior          | WMS-ER308L, Rev. | 6/13/94  | Cleaned ER308L Filler Material Specification, Revision 2  |
| C940097-00-B | Marty Tellalian     |                  | 6/6/94   | Qualification Test Procurement Summary  |
| C940098-00-B | Larry Jones         |                  | 6/15/94  | List of Tasks for 1st Contract Change from Caltech Purchasing   |
| C940099-00-B | Larry Jones         |                  | 6/16/94  | Request for Change Proposal - Beam Tube Enclosures  |
| C940100-00-B | Paula Morgan        |                  | 6/15/94  | "Over the Fence" copies of latest Quality Assurance Plan, Rev. 1, DRAFT, pages 1-12   |
| C940101-00-B | Paula Morgan        |                  | 6/15/94  | "Over the Fence" copies of latest Document Control Plan, Rev. 1, DRAFT, pages 2-4   |
| C940102-00-B | Larry Jones         |                  | 6/20/94  | "Over the Fence" Draft version of TDM 94-02   |
| C940103-00-B | Larry Jones         |                  | 6/20/94  | Proposed Agenda for FDR on 22-24 June 1994  |
| C940104-00-B | Larry Jones         |                  | 6/8/94   | Change Order #1 for P.O. PP108027 with CBI for Additional Effort  |
| C940105-00-B | Larry Jones         |                  | 6/30/94  | Conditional Approvals for Documents WMS-ER308L, TT-H1N, Shipping Restraints Drawing, WPS Spiral/WPS Spiral Alt., WPS Splice/WPS Repair, PQRs, and WPQs          |
| C940106-00-B | Warren A. Carpenter |                  | 7/8/94   | Meeting Minutes of July 5-6, 1994 re Coupon Outgassing Measurement Systems and CBI's Test Procedures  |

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|--------------|---------------------|-----------------|----------|---|
| C940107-00-B | Marty Tellalian     |                 | 7/25/94  | 10th Monthly Meeting Preliminary Agenda for 28-29 July 1994   |
| C940108-00-B | Marty Tellalian     |                 | 7/25/94  | Expansion Joint Fatigue Test Preliminary Manhour and Cost Estimates   |
| C940109-00-B | Marty Tellalian     |                 | 7/26/94  | Expansion Joint Fatigue Test Estimate   |
| C940110-00-B | Marty Tellalian     |                 | 7/27/94  | Action Items  |
| C940111-00-B | Marty Tellalian     |                 | 8/1/94   | Expansion Joint Fatigue Test Material & Fabrication Costs to Date   |
| C940112-00-B | Marty Tellalian     |                 | 8/8/94   | Schedule Detail for 7/25/94 Schedule Update   |
| C940113-00-B | Marty Tellalian     |                 | 8/10/94  | Expansion Joint Fatigue Test Request for Change   |
| C940114-00-B | Marty Tellalian     |                 | 9/14/94  | Change Request Order for Qualification Test I2R Bakeout   |
| C940115-00-B | Marty Tellalian     |                 | 9/16/94  | Excerpts from Senate Report 103-311   |
| C940116-00-B | Marty Tellalian     |                 | 9/23/94  | Hyspan Expansion Joint Spring Rate Test & 12 Monthly Review Meeting on 29 September 1994                                |
| C940117-00-B | Marty Tellalian     |                 | 7/28/94  | Change Order Request for Expansion Joint Fatigue Test - WBS #790  |
| C940118-00-B | Marty Tellalian     |                 | 7/12/94  | Change Order Request for Qualification Test I2R Bake Out  |
| C940119-00-B | Larry Jones         |                 | 8/31/94  | Update of Option Estimate Adjustments Listing   |
| C940120-00-B | Larry Jones         |                 | 8/19/94  | Proposed Agenda for Option Phase Costing and Implementation Schedule, 30 August 1994                                    |
| C940121-00-B | Larry Jones         |                 | 8/19/94  | Request for Change Proposal for the Beam Tube Termination and Pumping Equipment, DRAFT                                  |
| C940122-00-B | Irena Petrac        |                 | 8/9/94   | "Option" Provision on Contract #146 for LIGO Beam Tube Modules  |
| C940123-00-B | Larry Jones         |                 | 8/5/94   | Proposed Adjustments to April 1994 Option Estimate  |
| C940124-00-B | Joe Chopek          |                 | 7/26/94  | Article IV, Option of the Contract - Considerations   |
| C940125-00-B | Larry Jones         |                 | 2/16/94  | TDM 94-01 - PDR Recommendations Agreed to Be Within the Scope of Existing Contract                                      |
| C940126-00-B | Larry Jones         |                 | 6/16/94  | Replacement Drawing for Enclosure RFP, for clarity  |
| C940127-00-B | Larry Jones         |                 | 6/16/94  | Shipping of Coupon for Auger Testing  |
| C940128-00-B | Larry Jones         |                 | 6/16/94  | ER308L Filler Wire Hydrogen Outgassing Tests Acceptable for Qualification Test and Option Usage                         |
| C940129-00-B | Warren A. Carpenter |                 | 7/11/94  | Meeting Minutes for 5-6 July 1994 re Coupon Outgassing Test Apparatus and Procedures                                    |
| C940130-00-B | Marty Tellalian     |                 | 11/4/94  | Vertical Cleaning Station Including Solvent Wash  |
| C940131-00-B | Marty Tellalian     |                 | 11/21/94 | Estimating Accuracy Range   |
| C940132-00-B | Larry Jones         |                 | 10/28/94 | Beam Tube Cleaning - Meeting Discussion   |
| C940133-00-B | Larry Jones         |                 | 11/2/94  | Task Order #94-01   |
| C940134-00-B | Larry Jones         |                 | 11/8/94  | Task Order #94-02   |
| C940135-00-B | Larry Jones         |                 | 11/9/94  | Signed Task Order #94-01 and Task Order Progress Report   |
| C940136-00-B | Marty Tellalian     |                 | 11/9/94  | Signed Task Orders #94-01 and #94-02 for the Cleaning Investigation and Comparison                                      |
| C940137-00-B | Marty Tellalian     |                 | 11/23/94 | Budget Design and Estimate for a Horizontal Cleaning Station for the Mirachem Wash and Solvent Wash/Rinse               |
| C940138-00-B | Larry Jones         |                 | 12/8/94  | Task Order #94-03   |
| C940139-00-B | Larry Jones         |                 | 12/16/94 | Beam Tube Qualification Test Pumpdown Readiness Review Meeting held 14 December 1995                                    |
| C940140-00-B | Larry Jones         |                 | 6/10/94  | Approval of Draft Detailed Design of Priority Components (#2)   |
| C940141-00-B | Larry Jones         |                 | 10/4/94  | Approval of Draft Detailed Design of Priority Components (#3)   |
| C940142-00-B | Larry Jones         |                 | 11/16/94 | Approval of Draft Detailed Design of Priority Components (#4)   |
| C940143-00-P | Sven Svendsen       |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume I of 3, Technical/Management  |
| C940144-00-P | Sven Svendsen       |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume 2 of 3, Estimated Labor Rates and Costs                                       |
| C940145-00-P | Sven Svendsen       |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Oral Presentation Graphics   |
| C940146-00-P | Joseph Tarlton      |                 | 6/10/94  | Qualifications to Perform Architect-Engineering and Construction Management Services for LIGO in Response to RFP YM 193 |
| C940147-00-P | Joseph Tarlton      |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume I, Technical/Management   |
| C940148-00-P | Joseph Tarlton      |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume II, Cost Proposal   |
| C940149-00-P | Joseph Tarlton      |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Oral Presentation Graphics   |
| C940150-00-P | William E. Hall     |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume I, Technical/Management   |
| C940151-00-P | William E. Hall     |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Volume II, Cost Proposal   |
| C940152-00-P | William E. Hall     |                 | 9/23/94  | Proposal and Bid for RFP #YM 193 - Oral Presentation Graphics   |
| C940153-00-P | Irena Petrac        |                 | 1/19/94  | Contract Close Out Documents for P.O. PP122193  |
| C940154-00-B | Larry Jones         |                 | 8/4/94   | Approval of Project Control Plan Documents  |
| C940155-00-B | Larry Jones         |                 | 3/23/94  | Conditional Approval of the Design Qualification Test Plan and Procedures (CBI-BTM003AA1A01)                            |
| C940156-00-P | Mike T. Gamble      |                 | 12/12/94 | High Technology Engineering Services Payment Remittance and Withholding Contractual Provisions                          |
| C940157-00-P | Mike T. Gamble      |                 | 12/12/94 | High Technology Engineering Services Fiscal Information, Supplement 1   |
| C940158-00-P | Mike T. Gamble      |                 | 12/10/94 | High Technology Engineering Services Fiscal Information   |
| C940159-00-P | Mike T. Gamble      |                 | 10/10/94 | High Technology Engineering Services Acquisitions Information   |
| C940160-00-P | Mike T. Gamble      |                 | 9/22/94  | High Technology Engineering Services Anticipated Travel Costs   |
| C940161-00-P | Florence Gamble     |                 | 8/23/94  | Participation of High Technology Engineering Services on LIGO   |
| C940162-00-P | Gary Sanders        |                 | 8/22/94  | Statement of Work for High Technology Engineering Services on LIGO, Rev. O  |
| C940163-00-B | Marty Tellalian     |                 | 2/18/94  | Change Order Request for Qualification Test Configuration   |

| Document No  | Full Name                  | ContractorDocNo    | Doc Dt   | Full Title   |
|--------------|----------------------------|--------------------|----------|--|
| C940164-00-B | Marty Tellalian            |                    | 3/31/94  | I2R Bakeout of the Qualification Test  |
| C940165-00-B | Marty Tellalian            |                    | 5/18/94  | Man-Hours for Baffle Serrations Change Order Request   |
| C940166-00-O | Stephen R. Anderson        |                    | 6/29/94  | Installation of Temporary Service at Hanford   |
| C940167-00-O | Steve Hunter               |                    | 4/11/94  | Methods for Securing Initial Construction Costs for Power  |
| C940168-00-O | Bruce Etzel                |                    | 5/5/94   | Electrical Service Costs - Hanford   |
| C940169-00-O | James W. Sanders           |                    | 3/29/94  | Costs Reliability and Specifications of Power at Hanford   |
| C940170-00-O | Bruce Etzel                |                    | 4/4/94   | Benton REA Estimated Monthly Billing for the Ligo Project  |
| C940171-00-O | Charles L. Dawsey          |                    | 3/31/94  | Ligo Project Proposal  |
| C940172-00-O | Charles L. Dawsey          |                    | 3/17/94  | Intent to Respond to RFP to Provide Electrical Service to Ligo at Hanford  |
| C940173-00-B | Bill Althouse              |                    | 5/26/94  | LIGO Beam Tube Modules Contract, Final Design Review - Review Board Report   |
| C950000-00-U |                            |                    | 5/15/96  |  |
| C950001-00-U | D. M. Hedberg              | 00010496 (inv. #)  | 1/26/95  | Transmittal of Invoice #00010496, dated 01/03/95 for period ending 12/20/94  |
| C950002-00-P | Linda Turner               |                    | 2/3/95   | Distribution of CDRL Document #CBI-BTM013AA1M9412  |
| C950003-00-U | Concepts in Concrete       |                    | 1/26/95  | Transmittal of Invoice #95-03, P.O. PP132372 - Detailed Design and Associated Construction Plan for Precast Construction and Installation of the Beam Tube Enclosure (BTE) for LIGO at Hanford |
| C950004-00-U |                            |                    |          |  |
| C950005-00-U |                            |                    |          |  |
| C950006-00-P | Irena Petrac               |                    | 1/11/95  | Procurement for LIGO FDCM - Debriefing of ICF Kaiser (unsuccessful firm)   |
| C950007-00-U |                            |                    |          |  |
| C950008-00-U |                            |                    |          |  |
| C950009-00-U |                            |                    |          |  |
| C950010-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950011-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950012-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950013-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950014-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950015-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950016-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950017-00-I | Irena Petrac               |                    | 2/13/95  | Addendum #1 to RFP #201 (LIGO-C950051-00-P) - Additional Information   |
| C950018-00-U |                            |                    |          |  |
| C950018-A-P  |                            |                    | 5/18/95  | Work Breakdown Structure Dictionary, DRAFT   |
| C950019-00-U |                            |                    |          |  |
| C950020-00-O | Ara Arman                  |                    | 2/7/95   | Submission of Proposal for Oversight and Quality Control for Site Clearing for Aerial Survey in Livingston   |
| C950021-00-P | Irena Petrac               |                    | 2/10/95  | P.O. PP157708 with Telos Information Systems for Administrative Support  |
| C950021-01-A | Irena Petrac               |                    | 3/20/95  | Change Order #1 for P.O. PP157708 with Telos Information Systems   |
| C950022-00-V | Osamu Okaniwa              |                    | 2/6/95   | Response to Request for Proposal (RFP) MH-178 for the Vacuum Equipment for the LIGO Project  |
| C950023-00-U |                            |                    |          |  |
| C950023-00-V | Paul A. LoBello            |                    | 2/9/95   | RFP MH 178 for Vacuum Equipment  |
| C950024-00-U | Linda Turner               |                    | 2/7/95   | Distribution of CDRL Document #PAR-FDCM002AA1M9501   |
| C950025-00-O | Dames & Moore              | 016-05724 (inv. #) | 11/18/94 | Invoice for PO PC122193 for Construction Monitoring Services During Grading - Hanford  |
| C950026-00-U |                            |                    |          |  |
| C950027-00-V | Lockheed Missile and Space | LMSC-X940448P      | 2/10/95  | Proposal for RFP MH-178 for Vacuum Equipment for the LIGO Project  |
| C950028-00-U | Bill Talbott               | 94110-01 (inv. #)  | 2/8/95   | Invoice #94110-01 from Permit Surveying, Inc. for period 12/14/94/ - 1/25/95   |
| C950029-00-O | Dames & Moore              | 016-05803 (Inv. #) | 12/30/94 | Invoice for 11/12/94 through 12/23/94  |
| C950030-00-U |                            |                    |          |  |
| C950031-00-U |                            |                    |          |  |
| C950032-00-P | Linda Turner               |                    | 2/13/95  | Distribution of CDRL Document # PAR-FDCM003AA1A01  |
| C950033-00-P | David Latta                |                    | 2/8/95   | Decision to Decline Bidding on RFP #MH 178 - LIGO Vacuum Equipment   |
| C950034-00-P | Irena Petrac               |                    | 2/8/95   | Consulting Services Agreement with Katherine Creath, Ph.D, DRAFT   |
| C950035-00-U |                            |                    |          |  |
| C950036-00-O | Robert SeGall              |                    | 2/3/95   | 1994 and 1995 Schedule of Fees and Charges   |
| C950037-00-P | Prof. Katherine Creath     |                    | 2/1/95   | Response to Consulting Offer with Resume and Publication List  |
| C950038-00-O | Woodward-Clyde             | 56449 (inv. #)     | 1/27/95  | Invoice #56449 for period 12/17/94 through 1/20/95 - Geotechnical Services   |
| C950039-00-O | Woodward-Clyde             | 56193 (inv. #)     | 1/27/95  | Invoice #56193 for period 12/17/94 through 1/20/95 - Geotechnical Services   |
| C950040-00-U | Steve Peters               |                    | 2/8/95   | Beam Tube Material Cost  |
| C950041-00-O | Richard Speer              | 94B406-1           | 1/31/95  | Revised Copies of Bid documents for RFP # KD-203 - LIGO Site Preparation for Aerial Survey at Livingston, dated December 1994  |
| C950041-00-O | Ara Arman                  | 94B406-1           | 1/31/95  | Revised Copies of Bid documents for RFP # KD-203 - LIGO Site Preparation for Aerial Survey at Livingston, dated December 1994  |
| C950042-00-U | Guy Alexander              |                    | 2/13/95  | Request for RFP KD 203   |

| Document No  | Full Name           | ContractorDocNo     | Doc Dt  | Full Title   |
|--------------|---------------------|---------------------|---------|--|
| C950043-00-U | Earl Guidry         |                     | 2/13/95 | Request for RFP KD 203   |
| C950044-00-U | G.R. Speer          | 95B050-P            | 2/13/95 | Pre-bid Meeting and Site Visit in Baton Rouge, LA on February 23, 1995   |
| C950045-00-U | JUB Engineers, Inc. | 950275 (inv #)      | 1/23/95 | Invoice #950275 for period through 12/31/94  |
| C950046-00-O | Pat Moore           |                     | 2/16/95 | Request for RFP KD 203   |
| C950047-00-U |                     |                     |         |  |
| C950047-01-P | Irena Petrac        |                     | 2/6/96  | Change Order #1 to P.O. PC149361 with Katherine Creath for Performance Extension                               |
| C950047-02-P | Irena Petrac        |                     | 6/20/96 | Change Order #2 for P.O. PC149361 with Katherin Creath for Metrology Services                                  |
| C950047-05-P | Larry Jones         |                     | 4/12/96 | Change Order #5 for P.O. PP108027 with CBI   |
| C950048-00-P | Karen Dowd          |                     | 2/6/95  | Request for Proposal (RFP) KD 203 - LIGO Site Preparations for Aerial Survey, Livingston                       |
| C950049-00-U |                     |                     |         |  |
| C950050-00-D | Mike T. Gamble      | 95-LIGO-03 (inv. #) | 2/12/95 | Invoice #95-LIGO-03 for period 1/21/95 - 2/12/95   |
| C950051-00-P | Karen Dowd          |                     | 1/27/95 | Request for Proposal (RFP) KD 201 - Polishing Technology Demonstration/LIGO Pathfinder Test Masses             |
| C950052-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950053-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950054-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950055-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950056-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950057-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950058-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950059-00-P | Irena Petrac        |                     | 2/21/95 | Addendum #2 to RFP KD 201 (LIGO-C950051-00-P) - Specification Inconsistency                                    |
| C950060-00-P | Irena Petrac        |                     | 2/20/95 | Consulting Services Agreement with Paul J. Reardon, DRAFT  |
| C950061-00-U |                     |                     |         |  |
| C950062-00-O | Tim Melott          | 950213-3            | 2/16/95 | Minutes for Vibration and Acoustics Meeting of 13 February 1995  |
| C950063-00-O | Tim Melott          | 950213-2            | 2/16/95 | Minutes for Chamber Layouts and Operational Scenarios Meeting of 13 February 1995                              |
| C950064-00-O | Tim Melott          | 950214-1            | 2/16/95 | Minutes for Controlled Environment Meeting on 14 February 1995   |
| C950065-00-O | Jeff Hermann        | 950216-0            | 2/16/95 | Minutes of Tiger Team Meeting re Control and Data System (missing pages) held 16 February 1995                 |
| C950065-01-O | Jeff Hermann        | 950216-0            | 2/16/95 | Minutes of Tiger Team Meeting re Control and Data System (revised with no missing pages) held 16 February 1995 |
| C950066-00-O | Jeff Hermann        | 950215-0            | 2/16/95 | Minutes of Tiger Team Meeting - Global Issues, 15 February 1995  |
| C950067-00-O | Tim Melott          | 950216-1            | 2/17/95 | Minutes of Tiger Team Meeting - Operations Support Building (OSB), 16 February 1995                            |
| C950068-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950069-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950070-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950071-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950072-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950073-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950074-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950075-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950076-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950077-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950078-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950079-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-P) - Additional Information   |
| C950080-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950081-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950082-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950083-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950084-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950085-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950086-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950087-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950088-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C960023-00-V) - Additional Information   |
| C950089-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950090-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950091-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950092-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950093-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950094-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 for LIGO Vacuum Equipment(LIGO-C950023-00-V) - Additional Information                |
| C950095-00-P | Karen Dowd          |                     | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |

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|--------------|-----------------|-----------------|---------|--|
| C950096-00-P | Karen Dowd      |                 | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950097-00-P | Karen Dowd      |                 | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950098-00-P | Karen Dowd      |                 | 2/2/95  | Addendum #2 to RFP MH 178 (LIGO-C950023-00-V) - Additional Information   |
| C950099-00-P | Irena Petrac    |                 | 2/2/95  | Request for NSF Review and Approval for RFP KD 201 (LIGO-C950051-00-P) and RFP YM 199 (LIGO-C940055-00-P)                      |
| C950100-00-P | Irena Petrac    |                 | 2/7/95  | Change Order #2 for P.O. PC139071 with Richard Fischer for Performance Period Extension  |
| C950101-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950102-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950103-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950104-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950105-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950106-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950107-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO LA Site Preparations for Aerial Survey, Livingston   |
| C950108-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950109-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950110-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950111-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950112-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950113-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950114-00-P | Karen Dowd      |                 | 2/6/95  | RFP KD 203 for LIGO Site Preparations for Aerial Survey, Livingston  |
| C950115-00-P | Karen Dowd      |                 | 2/2/95  | Addendum # 2 for RFP #MH 178 (LIGO-C950023-00-V) - Additional Information  |
| C950116-00-U |                 |                 |         |  |
| C950117-00-U | Stan Whitcomb   |                 | 2/23/95 | ISF Grant Assistance Program Proposal for Collaborative Effort with Moscow State University                                    |
| C950118-00-P | Irena Petrac    |                 | 3/9/95  | Addendum #1 to RFP YM 199 (LIGO-C940055-00-P) - Clarification of Coating Uniformity Requirements for LIGO Optics               |
| C950119-00-P | Linda Turner    |                 | 2/27/95 | Distribution of CDRL Document #PAR-FDCM004AA1A01   |
| C950120-00-P |                 |                 | 2/22/95 | Invoice #0295076 for month of January 1995   |
| C950121-00-P | Robert SeGall   | 94B315          | 2/2/95  | Conceptual Designs for Pipeline Crossings of the LIGO Embankment   |
| C950121-00-P | Ara Arman       | 94B315          | 2/2/95  | Conceptual Designs for Pipeline Crossings of the LIGO Embankment   |
| C950122-00-P | Irena Petrac    |                 | 2/27/95 | Document Review Status for CDRL PAR-FDCM003AA1A01 (conditional)  |
| C950122-00-P | Fred Asiri      |                 | 2/27/95 | Document Review Status for CDRL PAR-FDCM003AA1A01 (conditional)  |
| C950123-00-P | Tyler Jackson   | 950214-0        | 2/17/95 | Construction Management Plan, Draft, dated 17 February 1995  |
| C950124-00-P | Dr. Chris Walsh |                 | 2/27/95 | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)   |
| C950125-00-O | Hal Amick, PE   | P95-LA-034      | 2/23/95 | Proposal for Vibration and Acoustics Consulting for LIGO Project   |
| C950126-00-O | Ara Arman       | 94B406          | 2/28/95 | Revised Spread Sheet for the Proposed "Oversight" Budget.  |
| C950127-00-O | Robert SeGall   |                 | 2/17/95 | Revised Text for the LIGO Geotechnical Report (C940056-A-O) for Livingston, Louisiana Site                                     |
| C950127-00-O | Ara Arman       |                 | 2/17/95 | Revised Text for the LIGO Geotechnical Report (C940056-A-O) for Livingston, Louisiana Site                                     |
| C950128-00-O | Jeff Hermann    | 950301-0        | 3/1/95  | Letter from Marshall Long Acoustics -- Caltech's Acoustical Background Levels Review   |
| C950129-00-V | Earl Friese     |                 | 2/28/95 | Status and Near Term Schedule of Major Events for RFP #MH 178 (LIGO-C950023-00-V) for LIGO Vacuum Equipment                    |
| C950130-00-O | Tyler Jackson   | 950306-1        | 3/6/95  | Review comments on the "Conceptual Design for Pipeline Crossings of the LIGO Embankment" by Woodward-Clyde (LIGO-C950121-00-P) |
| C950131-00-P | Robert Boh      |                 | 3/3/95  | Proposal and bid for RFP #KD 203 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA                 |
| C950132-00-P | M. Matt Durand  |                 | 3/2/95  | Proposal and bid for RFP #KD 203 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA                 |
| C950133-00-P | Timothy Mann    |                 | 3/2/95  | Proposal and bid for RFP #KD 203 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA                 |
| C950134-00-P | Dwight Smith    |                 | 3/3/95  | Proposal and bid for RFP #KD 203 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA                 |
| C950135-00-P | Rudy Chandler   |                 | 3/1/95  | Decision Not to Bid on RFP #KD 203 (LIGO-C950048-00-P)   |
| C950136-00-O | Tim Melott      | 950221-1        | 2/24/95 | Vibration and Acoustics Follow-Up Meeting Minutes for 21 February 1995   |
| C950137-00-O | Tyler Jackson   | 950221-0        | 2/21/95 | Site Recon Briefing Minutes for 21 February 1995   |
| C950138-00-O | Tim Melott      | 950222-1        | 2/24/95 | Operations Support Building (OSB) Follow-Up Tiger Team Meeting Minutes for 22 February 1995                                    |
| C950139-00-O | Tyler Jackson   |                 | 2/28/95 | LIGO Project Work Schedule   |
| C950140-00-O | Tyler Jackson   |                 | 2/24/95 | Hanford, WA Trip Report  |
| C950141-00-O | Karl Drobny     | PM-950224-0     | 2/24/95 | Livingston, LA Trip Report, 5 -10 February 1995  |
| C950142-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950143-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950144-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950145-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950146-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950147-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950148-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |
| C950149-00-P | Irena Petrac    |                 | 2/24/95 | Addendum #3 to RFP #KD 201 (LIGO-C950051-00-P) - Proposal Due Date Extension   |

| Document No  | Full Name                    | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|------------------------------|-----------------|---------|--|
| C950150-00-P | Linda Turner                 | 950216-0        | 3/3/95  | Control and Data System Tiger Team Meeting Minutes, REVISION to LIGO-C950065-00-P  |
| C950151-00-P | Tyler Jackson                | 950306-0        | 3/6/95  | Basic Design Criterion for the Access Road to the Livingston LIGO site   |
| C950152-00-P | James A. Beard               | E-539           | 3/3/95  | Proposal and Bid for RFP #KD 203 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA               |
| C950152-01-P | James A. Beard               | E-539, Rev. 1   | 3/24/95 | Proposal and bid for RFP #KD 203, Revision 1 (LIGO-C950048-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA   |
| C950153-00-P | Lynne Ebert                  |                 | 3/3/95  | Proposal and bid for RFP #KD 203 (LIGO-C950153-00-P) - LIGO Site Preparation for Aerial Survey, Livingston, LA               |
| C950154-00-O |                              |                 | 2/17/95 | Invoice #58054 for period covered from 12/31/94 through 2/3/95   |
| C950155-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950156-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950157-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection for Proprietary Information                                      |
| C950158-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protectin of Proprietary Information  |
| C950159-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950160-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950161-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950162-00-P | Karen Dowd                   |                 | 3/3/95  | Addendum #4 to RFP #KD 201 (LIGO-C950051-00-P) - Protection of Proprietary Information                                       |
| C950163-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950164-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950165-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950166-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950167-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950168-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950169-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950170-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950171-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950172-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950173-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950174-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950175-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950176-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950177-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950178-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950179-00-P | Irena Petrac                 |                 | 2/17/95 | Addendum #1 to RFP #KD 203 (LIGO-C950048-00-P) - Additional Requirement and Information                                      |
| C950180-00-B | Larry Jones                  |                 | 3/7/95  | Response to Change Order Request - Leak Rate Determination by Air Signature Analysis   |
| C950181-00-B | Marty Tellalian              |                 | 3/1/95  | Qualification Test Cleaning Report (Task Orders #94-1, #94-2, and #95-1)   |
| C950182-00-P |                              |                 |         |  |
| C950183-00-P |                              |                 |         |  |
| C950184-00-P |                              |                 |         |  |
| C950185-00-P |                              |                 |         |  |
| C950186-00-P |                              |                 |         |  |
| C950187-00-P |                              |                 |         |  |
| C950188-00-P | Jay Heefner                  |                 | 3/6/95  | Transmittal of Laser Power Stabilization Amplifier schematic D95-0001, rough parts placement diagram, preliminary parts list |
| C950189-00-P | Irena Petrac                 |                 | 2/10/95 | P.O. PP157708 with Telos Information Systems for Linda Turner  |
| C950190-00-P | Gary Sanders                 |                 | 3/7/95  | Transmittal of Final Report of the LIGO Vacuum Equipment Proposal Evaluation for Review and Approval                         |
| C950191-00-O |                              |                 | 2/1/95  | Construction Inspection Analysis   |
| C950192-00-O |                              |                 | 1/26/95 | Quality Control - Blank Form with Specification List   |
| C950193-00-O |                              |                 | 2/2/95  | Testing and Laboratory Services - Risk Factors and Risk Assessment   |
| C950194-00-O |                              |                 | 2/2/95  | Shop Certifications and Verifications - Risk Factors and Risk Assessment   |
| C950195-00-O | Tyler Jackson                | 950203-2        | 2/3/95  | Weekly Activity Report - Week ending 3 February 1995   |
| C950196-00-V | Proposal Review Committee    |                 | 3/7/95  | LIGO Vacuum Equipment Proposal Evaluation Report - CALTECH DISCREET  |
| C950197-00-V | Source Selection Board       |                 |         | Signature Sheet for the Source Selection Board   |
| C950198-00-P | Duane Willis                 |                 | 3/8/95  | Decision not to bid on RFP #KD 201 (LIGO-C950051-00-P)   |
| C950199-00-P | Source Selection Board       |                 | 3/10/95 | Source Selection Report  |
| C950200-00-P | Karen Dowd                   |                 | 3/9/95  | Acknowledgement of Award to PSI for RFP #MH 178 (LIGO-C940045-00-P)  |
| C950201-00-P | Karen Dowd                   |                 | 3/9/95  | Notification of Selection for RFP #MH 178 - Phase A (Design Competition)   |
| C950202-00-P | Karen Dowd                   |                 | 3/9/95  | Notification of Selection for RFP #MH 178 - Phase A (Design Competition)   |
| C950203-00-P | Karen Dowd                   |                 | 3/9/95  | Notification of Award for RFP #MH 178 (LIGO-C940045-00-P)  |
| C950204-00-P | Linda Turner                 |                 | 3/10/95 | Distribution of CDRL Document #PAR-FDCM002AA1M9502   |
| C950205-00-P | Dr. J. Schulte in den Baumen |                 | 3/7/95  | Proposal and Bid for RFP #KD 201(LIGO-C950051-00-P)  |



| Document No  | Full Name          | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|--------------------|-----------------|---------|---|
| C950206-00-P | R. Geyl            |                 | 3/1/94  | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)  |
| C950207-00-P | Fred Doss          |                 | 3/6/95  | Proposal and Bid for RFP #KD 201 (LIGO-C950207-00-P)  |
| C950208-00-P | Dr. Chris Walsh    |                 | 2/24/95 | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)  |
| C950209-00-P | Roxanne Ziegler    |                 | 3/8/95  | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)  |
| C950210-00-P | Paul E. Bookmiller |                 | 3/7/95  | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)  |
| C950211-00-P | Jean Siomkos       |                 | 3/6/95  | Proposal and Bid for RFP #KD 201 (LIGO-C950051-00-P)  |
| C950212-00-P | Irena Petrac       |                 | 3/10/95 | Caltech Discreet - Source Evaluation Plan for the Vacuum Equipment, Phase B                           |
| C950213-00-O |                    |                 | 2/24/95 | Invoice #59401 for period 1/21/95 through 2/17/95   |
| C950214-00-O |                    |                 | 2/24/95 | Invoice #59404 for period 1/21/95 through 2/17/95   |
| C950215-00-P | Rachel Quesada     |                 | 3/10/95 | Non-Disclosure Agreement  |
| C950216-00-P | Kiyoshi Shimotsuma |                 | 3/12/95 | Debriefing Request  |
| C950217-00-O | Charles Hinton     |                 | 2/1/95  | Environmental Assessment of the LIGO Facility, FINAL, dated January 1995                              |
| C950218-00-P | Earl Friese        |                 | 3/13/95 | Change Order #4 to P.O. PP146525  |
| C950219-00-P | Fred Asiri         |                 | 3/14/95 | Document Review Status for CDRL PAR-FDCM001AA1A01 (conditional)                                       |
| C950219-00-P | Irena Petrac       |                 | 3/14/95 | Document Review Status for CDRL PAR-FDCM001AA1A01 (conditional)                                       |
| C950220-00-P | Tyler Jackson      | 950310-0        | 3/10/95 | Request for Review Status on CDRL Submittals (Project Control Plan, Construction Management Plan)     |
| C950222-00-P | Irena Petrac       |                 | 3/14/95 | P.O PP159096 with Applied Integration Management (AIM) for the LIGO Project Management Control System |
| C950223-00-V | Lamar Benner       |                 | 3/14/95 | Analytical Report on Subsidiary Company, Process Systems International, Inc.                          |
| C950224-00-P | Ray Yuen           |                 | 3/2/95  | 3/14/95 MIT Fax Request for Authorization to Purchase Equipment                                       |
| C950225-00-P | Earl Friese        |                 | 3/15/95 | P.O. PP159096 for Review and Approval   |
| C950226-00-P | Karen Dowd         |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950227-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950228-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950229-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950230-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950231-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950232-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950233-01-P | Irena Petrac       |                 | 3/14/95 | Change Order #1 to P.O. PP086652 with Breault Research Organization for Scattered Light Analysis      |
| C950233-02-P | Irena Petrac       |                 | 2/6/96  | Change Order #2 for P.O. PP086652 with Breault Research Organization, Inc. for Performance Extension  |
| C950234-00-U |                    |                 |         |   |
| C950235-00-U |                    |                 |         |   |
| C950236-00-P | Irena Petrac       |                 | 3/23/95 | Change Order #6 and #7 for P.O. PC119673 with J.U.B. Engineers, Inc.                                  |
| C950237-00-U |                    |                 |         |   |
| C950238-00-U |                    |                 |         |   |
| C950239-00-U |                    |                 |         |   |
| C950240-00-U |                    |                 |         |   |
| C950241-00-P | Irena Petrac       |                 | 3/16/95 | Addendum #4 for RFP #KD 203 (LIGO-C950048-00-P) - Bid Adjustment for Changed Conditions               |
| C950242-00-O | Fred Asiri         |                 | 3/16/95 | 60 % Facility Concept Presentation at Parsons   |
| C950243-00-P | Earl Friese        |                 | 3/22/95 | Review/Approval Cooperative Agreement PHY-9210038   |
| C950244-00-P | Earl Friese        |                 | 3/20/95 | Review/Approval Cooperative Agreement PHY-9210038 (PP161533 & PP161532)                               |
| C950245-00-P | Irena Petrac       |                 | 3/21/95 | Transmittal of PO PP161533 for Review and Concurrence Signature and Kickoff Meeting Agenda            |
| C950246-00-P | Irena Petrac       |                 | 3/21/95 | Transmittal of PO PP161532 for Review and Concurrence Signature and Kickoff Meeting Agenda            |
| C950247-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950248-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950249-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950250-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950251-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950252-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950253-00-P | Karen Dowd         |                 | 3/22/95 | Addendum #5 to RFP KD 203 (LIGO-C950048-00-P) - Additional Information                                |
| C950254-00-P | Earl Friese        |                 | 3/24/95 | Clarification for Review and Approval of RFP MH 178 (LIGO-C940045-00-P) - Vacuum Equipment            |
| C950255-00-O | Tyler Jackson      | 950324-3        | 3/24/95 | Weekly Activity Report for Week Ending 3/24/95  |
| C950256-00-D | Robert Spero       |                 |         |   |
| C950257-00-P | Mary Kay           |                 | 3/23/95 | Change Order #1 to P.O. #PP112285 with U.S. Department of Energy, Hanford                             |
| C950258-00-P | Sharon Brock       |                 | 3/23/95 | Purchase Order/Memo Sample for Hanford  |
| C950259-00-P | Tom Starr          |                 | 3/24/95 | Vacuum System Kickoff Meeting - Anticipated Attendees from PSI  |
| C950260-00-P | Paul A. LoBello    |                 | 3/24/95 | Vacuum System Kickoff Meeting - Anticipated Attendees from CBI  |
| C950261-00-P | Paul Reardon       |                 | 3/27/95 | Consulting Services Agreement for Paul Reardon, P.O #PP162623   |

| Document No  | Full Name       | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|-----------------|------------------|---------|---|
| C950262-00-O | Fred Asiri      |                  | 3/28/95 | Meeting Minutes for Monthly Status Report, March 23, 1995   |
| C950262-01-O | Fred Asiri      |                  | 3/28/95 | Meeting Minutes for Monthly Status Report, March 23, 1995, REVISED                                  |
| C950263-00-M | Barry Barish    |                  | 3/29/95 | Will hold in Gary Sanders' office - ADMINISTRATIVE CONFIDENTIAL                                     |
| C950264-00-D | Dr. Chris Walsh | CB00218/LN051726 | 2/2/96  | Progress Payment Against Milestone #2   |
| C950264-00-M | Barry Barish    |                  | 3/29/95 | Will hold in Gary Sanders' office - ADMINISTRATIVE CONFIDENTIAL                                     |
| C950265-00-O | Jeff Herrman    | 950317-1         | 3/20/95 | Facility 60% Concept Presentation Meeting Minutes, 17 March 1995                                    |
| C950266-00-B | Marty Tellalian |                  | 3/23/95 | Updated Budgetary Estimate for Module Leak Testing  |
| C950267-00-B | Marty Tellalian |                  | 3/27/95 | Initiation Beam Tube Option Negotiations  |
| C950268-00-B | Marty Tellalian |                  | 3/27/95 | Initiation of Beam Tube Option Negotiations   |
| C950269-00-B | Marty Tellalian |                  | 3/24/95 | QTR Task List and Beam Tube Enclosure Mock-Up Request for Change                                    |
| C950270-00-B | Marty Tellalian |                  | 3/24/95 | Change Order Request for Beam Tube Cover Mock-Up  |
| C950271-00-O | Bruce Easterly  |                  | 3/20/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P)   |
| C950272-00-O | M. Matt Durand  |                  | 3/23/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P)   |
| C950273-00-O | Dwight Smith    |                  | 3/23/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P)   |
| C950274-00-O | Robert Boh      |                  | 3/24/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P)   |
| C950275-00-O | Wayne Prats     |                  | 3/23/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P) - 90 days of performance                            |
| C950276-00-O | Wayne Prats     |                  | 3/23/95 | Revised Bid for RFP #KD-203 (LIGO-C950048-00-P) - 60 days of performance                            |
| C950277-00-B | Marty Tellalian |                  | 3/22/95 | Updated Budgetary Estimate for Module Cleaning  |
| C950278-00-V | Karen Sandberg  |                  | 3/27/95 | NSF Approval for Phase A Competition for LIGO Vacuum Equipment Design Between CBI and PSI           |
| C950279-00-I | Sandi Swarthout |                  | 3/13/95 | Application for Support for Work on an Interferometric Motion Sensor                                |
| C950280-00-O | Tyler Jackson   | 950324-0         | 3/24/95 | Project Coordination Meeting Minutes, 23 March 1995, DRAFT  |
| C950281-00-O | Tim Melott      | 950323-0         | 3/27/95 | Operational Support Building (OSB) Concept Planning Review Meeting Minutes, 23 March 1995           |
| C950282-00-O | Jeff Hermann    | 950327-0         | 3/27/95 | Beam Tube Enclosure Meeting Minutes, 27 March 1995  |
| C950283-00-O | Jeff Hermann    | 950328-0         | 3/28/95 | Recommendations Made by R. Weiss Requiring TDMs   |
| C950284-00-B | Marty Tellalian |                  | 3/23/95 | Request for Change for GPS Testing  |
| C950285-00-B | Marty Tellalian |                  | 3/29/95 | Revised Request for Change for Data Acquisition   |
| C950286-00-B | Marty Tellalian |                  | 3/28/95 | Revised Request for Change for Data Acquisition   |
| C950287-00-B | Marty Tellalian |                  | 3/28/95 | Revised Change Order Request for Data Acquisition   |
| C950288-00-B | Marty Tellalian |                  | 3/23/95 | Change Order Request for Concrete Material Tests for GPS Alignment Compatibilities                  |
| C950289-00-P | Karen Dowd      |                  | 3/30/95 | Notice of Selection for Negotiations and Subsequent Award Regarding RFP #KD 201 (LIGO-C950051-00-P) |
| C950290-00-P | Karen Dowd      |                  | 3/30/95 | Notice of Selection for Negotiations and Subsequent Award Regarding RFP #KD 201 (LIGO-C950051-00-P) |
| C950291-00-P | Karen Dowd      |                  | 3/30/95 | Notice of denied RFP #KD 201 (LIGO-C950051-00-P)  |
| C950292-00-P | Karen Dowd      |                  | 3/30/95 | Notice of denied RFP #KD 201 (LIGO-C950051-00-P)  |
| C950293-00-P | Karen Dowd      |                  | 3/30/95 | Notice of denied RFP #KD 201 (LIGO-C950051-00-P)  |
| C950294-00-P | Karen Dowd      |                  | 3/30/95 | Notice of denied RFP #KD 201 (LIGO-C950051-00-P)  |
| C950295-00-P | Karen Dowd      |                  | 3/30/95 | Notice of denied RFP #KD 201 (LIGO-C950051-00-P)  |
| C950296-00-O | Fred Asiri      | 950407-0         | 3/31/95 | TDM - Proceed with Trade Study for the Beam Tube Enclosure (BTE) Configuration                      |
| C950297-00-O | Fred Asiri      | 950406-1         | 3/31/95 | TDM - Amendment of Appendix C of RFP YM 193   |
| C950298-00-O | Linda Turner    |                  | 3/24/95 | Receipt of CDRL #PAR-FDCM003AA1A02 as a WORKING DRAFT   |
| C950299-00-O | Linda Turner    |                  | 3/30/95 | Transmittal of CDRL #PAR-FDCM001AA1B02, Project Control Plan, dated 30 March 1995                   |
| C950300-00-B | Larry Jones     |                  | 3/31/95 | TDM 95-01- Clarification for CDRL Submittals  |
| C950301-00-P | Ray Yuen        |                  | 3/29/95 | 3/29/95 MIT Fax Request for Authorization to Purchase Equipment, letter dated 3/29/95               |
| C950302-00-P | Ray Yuen        |                  | 3/24/95 | 3/24/95 MIT Fax Request for Authorization to Purchase Equipment, letter dated 3/24/95               |
| C950303-00-P | Ray Yuen        |                  | 3/27/95 | 3/27/95 MIT Fax Request for Authorization to Purchase Equipment, letter dated 3/24/95               |
| C950304-00-P | Rachel Quesada  |                  | 3/31/95 | Non-Disclosure Agreement for REOI   |
| C950305-00-P | Earl Friese     |                  | 4/3/95  | P.O. #PC162872 for Interferometric Motion Sensor/Australian National University                     |
| C950306-00-D | Rick Savage     |                  | 4/3/95  | Transmittal of LIGO-T950008-A-E, "Multi-Thin Layer Coating Modeling"                                |
| C950307-00-P | Irena Petrac    |                  | 4/3/95  | Release of PR #PP162519 for LIGO Optics Coating Technology Demonstration                            |
| C950308-00-P | Karen Dowd      |                  | 4/4/95  | RFP #JT 214 (LIGO-C950309-00-P) - Optical Design and Analysis/LIGO Optics                           |
| C950309-00-P |                 |                  | 4/4/95  | RFP #JT 214 (LIGO-C950309-00-P) - Optical Design and Analysis/LIGO Optics                           |
| C950310-00-O | Tyler Jackson   | PM-950331-0      | 3/31/95 | Record of Conversation on 90% Concept Submittal   |
| C950311-00-B | Marty Tellalian |                  | 1/16/95 | Change Order Request for Leak Rate Determination By Air Signature Analysis                          |
| C950312-00-B | Marty Tellalian |                  | 3/14/95 | Additional Bake Time and Hyspan Response to 3/10 Conference Call                                    |
| C950313-00-B | Larry Jones     |                  | 1/3/95  | Acknowledgement of Receipt of Print Transmittal   |
| C950314-00-B | Marty Tellalian |                  | 1/12/95 | Current Schedule and Draft Air Signature Request for Change   |
| C950315-00-U |                 |                  |         |   |
| C950316-00-P | Karen Dowd      |                  | 4/7/95  | Transmittal of PO PP161532 with CBI for Vacuum Equipment Design Competition (Phase A)               |

| Document No  | Full Name       | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-----------------|-----------------|---------|---|
| C950317-00-O |                 |                 | 4/17/95 | Closeout Invoice  |
| C950318-00-P | Karen Dowd      |                 | 4/5/95  | Transmittal of PO and Contract #PP161533  |
| C950319-00-P | Irena Petrac    |                 | 4/5/95  | Transmittal of PO and Contract #PP161532 (Advance and unsigned copy)  |
| C950320-00-P | Irena Petrac    |                 | 4/5/95  | Transmittal of PO and Contract #PP161533 (Advance and unsigned copy)  |
| C950321-00-P | Ed Jasnow       |                 | 4/7/95  | Contract #PP161532 between CIT and CBI for LIGO Vacuum Equipment Design Competition (Phase A)                                     |
| C950321-00-P | John Worden     |                 | 4/7/95  | Contract #PP161532 between CIT and CBI for LIGO Vacuum Equipment Design Competition (Phase A)                                     |
| C950322-00-P | Ed Jasnow       |                 | 4/7/95  | Contract #PP161533 between CIT and PSI for LIGO Vacuum Equipment Design Competition (Phase A)                                     |
| C950322-00-P | John Worden     |                 | 4/7/95  | Contract #PP161533 between CIT and PSI for LIGO Vacuum Equipment Design Competition (Phase A)                                     |
| C950323-00-P |                 |                 |         | General Provisions  |
| C950324-00-P |                 |                 | 3/1/95  | Additional General Provisions   |
| C950325-00-P |                 |                 |         | Certifications  |
| C950325-01-P |                 |                 |         | Certifications  |
| C950326-00-P |                 |                 |         | Vacuum Equipment Specification (also LIGO-E940002-01-V)   |
| C950327-00-P |                 |                 |         | Deliverable Documentation   |
| C950328-00-P |                 |                 |         | Beam Tube Deliverables  |
| C950329-00-P |                 |                 |         | Hardware Deliverables   |
| C950330-00-P |                 |                 |         | Phase B Scope of Work, Delivery or Performance Schedule, and Price and Payment  |
| C950331-00-P | Earl Friese     |                 | 4/6/95  | Advance copy of PO #PP162519 for LIGO Optics Coating Tech. Demo   |
| C950332-00-P | Doug Jungwirth  |                 | 4/7/95  | Memo to file to recommend issue of RFP # JT 214 (LIGO-C950309-00-P)   |
| C950333-00-P | Irena Petrac    |                 | 4/7/95  | PO # PP155642 with Optical Research Associates (ORA) for Optical Design Analysis  |
| C950333-01-P | Irena Petrac    |                 | 2/6/96  | Change Order #1 for P.O. PP155642 with Optical Research Associates (ORA) for Performance Extension                                |
| C950334-00-P |                 |                 | 4/7/95  | Exhibit I, Statement of Work to PO # PP155642   |
| C950335-00-P |                 |                 | 4/7/95  | P.O. PP155642 and P.O. PP164701, Exhibit III - Technical Direction Memorandum   |
| C950336-00-P |                 |                 | 4/7/95  | P.O. PP155642, Rights to Inventions   |
| C950337-00-P |                 |                 | 4/7/95  | P.O. PP155642 and P.O. PP164701, Exhibit VI - Additional Conditions (U.S.)  |
| C950338-00-V | John Worden     |                 | 4/10/95 | TDM 01 - Meeting Schedule   |
| C950339-00-V | John Worden     |                 | 4/10/95 | TDM 02 - Meeting Schedule   |
| C950340-00-V | John Worden     |                 | 4/10/95 | Transmittal of TDM 01   |
| C950341-00-V | John Worden     |                 | 4/10/95 | Transmittal of TDM 02   |
| C950342-00-O | Fred Asiri      |                 | 4/10/95 | Transmittal of TDM 95-03  |
| C950343-00-O | Fred Asiri      | 950412-0        | 4/10/95 | TDM 95-03   |
| C950344-00-O | Tyler Jackson   | 950406-0        | 4/6/95  | Project Status Report Meeting Minutes of 5 April 1995   |
| C950345-00-O | Linda Turner    |                 | 4/10/95 | Distribution of CDRL #PAR-FDCM002AA1M9503   |
| C950346-00-B | Larry Jones     |                 | 4/7/95  | QTR Agenda Modifications  |
| C950347-00-O | Richard Speer   | 95B050          | 4/10/95 | Contractor Evaluation for Site Clearing for Aerial Survey, RFP #KD 203 (LIGO-C950048-00-P)  |
| C950347-00-O | Ara Arman       | 95B050          | 4/10/95 | Contractor Evaluation for Site Clearing for Aerial Survey, RFP #KD 203 (LIGO-C950048-00-P)  |
| C950348-00-O | James A. Beard  | E-539           | 4/5/95  | Qualification Submittals  |
| C950349-00-P |                 |                 | 4/5/95  | Certifications (long form) - Temporary Number   |
| C950350-00-D | Rick Savage     |                 | 4/11/95 | Transmittal of technical note   |
| C950351-00-O | Arthur Theis    |                 | 3/30/95 | Drainage Plan with Hydrologic and Hydraulic Report, dated March 1995, FINAL   |
| C950352-00-P | Irena Petrac    |                 | 4/12/95 | Information regarding Change Order #10, 12, & 13 for P.O. #PP045667 to NSF  |
| C950352-01-P | Irena Petrac    |                 | 4/12/95 |   |
| C950352-13-P | Irena Petrac    |                 | 9/29/95 | MIT Contract Change Order #15, P.O.   |
| C950352-15-P | Irena Petrac    | PPO45667        | 1/26/96 | Change Order #17 for P.O. PP045667 with MIT - Interim FY 96 Funding   |
| C950352-17-P | Irena Petrac    | PP045667        | 5/22/96 | Change Order #19 for PPO45667   |
| C950353-00-B | Marty Tellalian |                 | 4/11/95 | TDM 95-01 - taking exception to   |
| C950354-00-B | Marty Tellalian |                 | 4/11/95 | TDM 95-01 - transmittal of response and support technical notes   |
| C950355-00-P | Irena Petrac    |                 | 4/14/95 | P.O. PP164701 for LIGO Optics Polishing Technology (Hughes Danbury) - Internal Signature Release and Recommendation               |
| C950356-00-P | Irena Petrac    |                 | 4/14/95 | P.O. PP164701 with HDOS for LIGO Optics Polishing Technology Demonstration  |
| C950356-02-P | Irena Petrac    |                 | 3/7/96  | Change Order #2 for P.O. PC164701 with HDOS - Increased Funds for Optics Polishing Technology and to Close Out the Purchase Order |
| C950357-00-P |                 |                 | 4/14/95 | P.O. PP164702, Exhibit I - Statement of Work  |
| C950358-00-P |                 |                 | 4/14/95 | P.O. PP164702, Exhibit II - Hughes Danbury Proposal (P-1947)  |
| C950359-00-P | Irena Petrac    |                 | 4/12/95 | "Rights to Inventions" Exhibit and Additional Conditions for Advance Review   |
| C950360-00-P |                 |                 | 4/14/95 | Additional Conditions (International Contractors)   |
| C950361-00-P | Linda Turner    |                 | 4/14/95 | Distribution of CDRL #PAR-FDCM004AA1A01   |
| C950362-00-P | Linda Turner    |                 | 4/14/95 | Distribution of CDRL #PAR-FDCM004AA2A01   |
| C950363-00-P | Linda Turner    |                 | 4/14/95 | Distribution of CDRL #PAR-FDCM004AA4A01   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-----------------|-----------------|---------|---|
| C950364-00-P | Linda Turner    |                 | 4/14/95 | Distribution of CDRL #PAR-FDCM004AA5X01   |
| C950365-00-P |                 |                 | 4/7/95  | P.O. PP164701, Rights to Inventions   |
| C950366-00-O | Tyler Jackson   | PM-950411-0     | 4/11/95 | Record of Conversation re. BTE Trade Study Schedule and Estimate  |
| C950367-00-O | Tyler Jackson   | PM-950407-0     | 4/7/95  | Record of Conversation re. Calculations for Transient Environments  |
| C950368-00-B | Marty Tellalian |                 | 4/11/95 | To inform that CBI takes exception to TDM #95-01 items for DRD #04  |
| C950369-00-P | Irena Petrac    |                 | 4/21/95 | High Technology Engineering Servives (HTES), P.O. PP146525/NSF Approval   |
| C950370-00-P | Irena Petrac    |                 | 4/19/95 | Suggestions for P.O. PC157708 - Telos Information Systems   |
| C950371-00-P | Earl Friese     |                 | 4/10/95 | Review and Approval of Proposed Subcontract to REO for LIGO Detector Core Optics Development (P.O. PP162519)  |
| C950372-00-P | Earl Friese     |                 | 4/10/95 | Request for Review and Approval of P.O. PC162872 with the Australian National University (ANU) for Development & Performance Verification of an Interferometric Motion Sensor |
| C950373-00-P | Rachel Quesada  |                 | 3/31/95 | Revised Non-disclosure Agreement with REO Authorized Signature  |
| C950374-00-O | Tyler Jackson   | 950407-1        | 4/7/95  | Computer Integrated Engineering Implementation Plan, DRAFT  |
| C950375-00-O | G.R. Speer      | 95B050          | 4/12/95 | Clarification of Ratings on the Completed Contractor Bid Review (LIGO-C950347-00-O) for RFP KD 203  |
| C950375-00-O | Ara Arman       | 95B050          | 4/12/95 | Clarification of Ratings on the Completed Contractor Bid Review (LIGO-C950347-00-O) for RFP KD 203  |
| C950376-00-V | Tom Starr       |                 | 4/19/95 | Request for Clarification - Specification Figure 8 (Drawing 1101009, Beam Split Chamber)  |
| C950377-00-B | Linda Turner    |                 | 4/14/95 | Distribution of CDRL #PAR-FDCM004AA3A01   |
| C950378-00-V | John Worden     |                 | 4/20/95 | Update #1 Meeting Agenda for 28 April 1995  |
| C950379-00-P | John Worden     |                 | 4/20/95 | Update #1 Meeting Agenda for 28 April 1995  |
| C950380-00-P | Irena Petrac    |                 | 4/13/95 | P.O. #PP164620 with Acentech Inc. for Vibration Attenuation Support   |
| C950381-00-P | Irena Petrac    |                 | 4/20/95 | Transmittal of Section - 1 "Incorporated In All Purchase Orders"  |
| C950382-00-O | Fred Asiri      |                 | 4/21/95 | Transmittal of TDM #95-04   |
| C950383-00-O | Fred Asiri      | 950421-1        | 4/20/95 | TDM #95-04 - Proceed with Preliminary Design of the Rough Grading for the Livingston Site   |
| C950384-00-P | Linda Turner    |                 | 4/17/95 | Distribution of CDRL #CBI-BTM010AA1X01-1 (Items I & II, Drd #5)   |
| C950385-00-P | Linda Turner    |                 | 4/21/95 | Distribution of CDRL #CBI-BTM010AA1X01-2, Item IV (Administrative Confidential)   |
| C950386-00-O | Ara Arman       | 95B050          | 4/19/95 | Clarification of T. L. James Bid for RFP KD 203 - Site Clearing   |
| C950386-00-O | Richard Speer   | 95B050          | 4/19/95 | Clarification of T. L. James Bid for RFP KD 203 - Site Clearing   |
| C950387-00-O | Linda Turner    |                 | 4/21/95 | Distribution of CDRL #PAR-FDCM004AA3A02   |
| C950388-00-V | John Worden     |                 | 4/21/95 |   |
| C950389-00-V | John Worden     |                 | 4/21/95 |   |
| C950390-00-P | Irena Petrac    |                 | 4/21/95 | Transmittal of LIGO-C950369-00-P and LIGO-C950370-00-P  |
| C950391-00-P | Mike T. Gamble  |                 | 3/13/95 | Statement of Work - Seismic Isolation Stack Optimization  |
| C950392-00-O | Fred Asiri      |                 | 4/21/95 | TDM 95-05; LIGO-L950238 supersedes related information provided in RFP YM193, Appendix A  |
| C950393-00-O | Linda Turner    |                 | 4/21/95 | Transmittal of TDM 95-05  |
| C950394-00-V | William Murphy  |                 | 4/20/95 | Acknowledgement Copy of PO PP161533 and Signed Contract Document  |
| C950395-00-B | William Tyler   |                 | 4/14/95 | LIGO Project Gas Purge Welding Incident   |
| C950396-00-P | Irena Petrac    |                 | 4/24/95 | Sole Source Justification for Change Order #2 for PO PP112285 for EPICS software support  |
| C950397-00-P | Irena Petrac    |                 | 4/22/95 | Subcontract for Optics Polishing Technology Demonstration/Legal Review (HDOS)   |
| C950398-00-P | Paul Reardon    |                 | 4/13/95 | General questions for P.O. PP162623   |
| C950399-00-P | Paul A. LoBello |                 | 4/21/95 | Contract Acceptance Letter, DRAFT, for provision of comments  |
| C950400-00-P | Joan Boughan    |                 | 4/11/95 | Authorization to Purchase Equipment PP045667 (Rai Weiss)  |
| C950401-00-V | Paul A. LoBello |                 | 4/21/95 | Questions raised for subject contract PP161532  |
| C950402-00-P | Irena Petrac    |                 | 4/26/95 | Land Clearing Bid Evaluation Report - DISCREET  |
| C950403-00-P |                 |                 | 4/26/95 | Attachment B-1 to Land Clearing Bid Evaluation Report - Form letters used for RFP #KD 203   |
| C950404-00-P |                 |                 |         | Attachment C-1 to Land Clearing Bid Evaluation Report - Bid Comparison for all Submitters   |
| C950405-00-P |                 |                 |         | Attachment C-2 to Land Clearing Bid Evaluation Report - Bid Comparison Summary  |
| C950406-00-P |                 |                 |         | Attachment D-1 to Land Clearing Bid Evaluation Report - Bid Comparison 60/90 days   |
| C950407-00-P |                 |                 |         | Attachment D-2 to Land Clearing Bid Evaluation Report - Bid Comparison 60/90 days Summary   |
| C950408-00-P |                 |                 |         | Attachment D-3 to Land Clearing Bid Evaluation Report - Comparison of Re-Bid 60 Day   |
| C950409-00-P |                 |                 |         | Attachment E-1 to Land Clearing Bid Evaluation Report - Woodward-Clyde Bid Review   |
| C950410-00-P |                 |                 |         | Attachment E-2 to Land Clearing Bid Evaluation Report - Woodward-Clyde Bid Review (Revised)   |
| C950411-00-P |                 |                 |         | Attachment F to Land Clearing Bid Evaluation Report - Selection of Site Contractor  |
| C950412-00-P |                 |                 |         | Attachment G to Land Clearing Bid Evaluation Report - Revised Bid Form from James Industrial Contractors, Inc.  |
| C950413-00-P |                 |                 |         | Attachment A to Land Clearing Bid Evaluation Report - Mailing List for RFP #KD 203  |
| C950414-00-P |                 |                 |         | Attachment B-2 to Land Clearing Bid Evaluation Report - Form letters used for RFP #KD 203   |
| C950415-00-P | Larry Jones     |                 | 4/27/95 | Task Order 95-02 - GPS/Concrete Testing   |
| C950416-00-V | John Worden     |                 | 4/24/95 | Vacuum Equipment Controls and the Phase A Contractors   |
| C950416-00-V | Mike Zucker     |                 | 4/24/95 | Vacuum Equipment Controls and the Phase A Contractors   |
| C950417-00-O | Rick Savage     |                 | 4/26/95 | Trade Study Decisions from 25 April Meeting - (Support for TDM 95-06)   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-----------------|-----------------|----------|---|
| C950418-00-O | Fred Asiri      | 950505-0        | 4/26/95  | TDM 95-06; Proceed with Trade Studies and Cost Reductions   |
| C950419-00-O | Irena Petrac    |                 | 4/27/95  | PO #PP161533 for LIGO Vacuum Equipment Design Competition (Phase A)/Clarification                                   |
| C950420-00-P | Earl Friese     |                 | 4/27/95  | Request for review and approval of PO #PP164701 for LIGO Optics Polishing Technology Demonstration                  |
| C950421-00-P | Irena Petrac    |                 | 4/27/95  | Advise on request for incorporation (partial attachment: LIGO-C950323-00-P)   |
| C950422-00-O | Fred Asiri      |                 | 4/28/95  | Transmittal of TDM 95-06  |
| C950423-00-O | Tyler Jackson   | 950428-0        | 4/28/95  | Rejection of TDM 95-05  |
| C950424-00-O | Tyler Jackson   | PM-950426-0     | 4/26/95  | Record of Conversation with Mike Bullard (Benton REA) on 26 April 1995 re. Site Power Supply - Hanford              |
| C950425-00-O | Tyler Jackson   | 950428-2        | 5/1/95   | Weekly Activity Report, Week Ending 4/28/95   |
| C950426-00-P | Karen Dowd      |                 | 5/1/95   | Acceptance/Award for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950427-00-P | Karen Dowd      |                 | 5/1/95   | Denial for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950428-00-P | Karen Dowd      |                 | 5/1/95   | Denial for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950429-00-P | Karen Dowd      |                 | 5/1/95   | Denial for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950430-00-P | Karen Dowd      |                 | 5/1/95   | Denial for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950431-00-P | Karen Dowd      |                 | 5/1/95   | Denial for Proposal in Response to RFP #KD 203 (LIGO-C950048-00-P)  |
| C950432-00-P | Ed Jasnow       |                 | 5/1/95   | Change Order #3 to Contract C146, Beam Tube Module (LIGO-C930002-00-B)  |
| C950433-00-V | John Worden     |                 | 5/2/95   | Update 1 Meeting Minutes  |
| C950434-00-V | John Worden     |                 | 5/2/95   | Update 1 Meeting Minutes  |
| C950435-00-P |                 |                 | 5/2/95   | P.O. #PP155642  |
| C950436-00-P | Irena Petrac    |                 | 5/3/95   | P.O. #PP166240 with T.L. James Industrial Contractors, Inc. - Land Clearing, LIGO Site, Livingston                  |
| C950436-02-P | Ed Jasnow       |                 | 11/28/95 | Change Order #2 for P.O. PP166240 with T. L. James Industrial Contractors, Inc. - to Cover Performance Bond         |
| C950436-03-P | Ed Jasnow       |                 | 2/6/96   | Change Order #3 to P.O. PP166240 with T.L. James Industrial Contractors, Inc. - Raise Contract Value for Extra Work |
| C950437-00-P |                 |                 | 5/5/95   | Specifications for LIGO Site Preparation for Aerial Survey, Livingston, LA (RFP #KD 203)                            |
| C950438-00-P |                 |                 | 5/5/95   | Additional Provisions (Articles 1-24) in support of P.O. #PP166240  |
| C950439-00-P |                 |                 | 5/5/95   | Certifications for P.O. #PP166240   |
| C950440-00-P | Irena Petrac    |                 | 5/5/95   | P.O. #PP166239 - Specialized Technical & Managerial Support, LIGO Site, Hanford, WA                                 |
| C950441-00-P | Linda Turner    |                 | 5/1/95   | Distribution of CDRL #PAR-FDCM004AB1A01   |
| C950442-00-B | Marty Tellalian |                 | 5/4/95   | Signed copy of Task Order #95-02 for the GPS/Concrete Testing   |
| C950443-00-O | Tyler Jackson   | PM-950421-0     | 4/21/95  | Quick Start Construction-FY 95  |
| C950444-00-O | Tim Melott      | 950419-0        | 4/25/95  | Pipeline Meeting with Shell, Meeting Minutes for 19 April 1995  |
| C950445-00-O | Tyler Jackson   |                 | 4/20/95  | Concept Review Presentation Meeting Minutes   |
| C950446-00-O | Tyler Jackson   |                 | 4/24/95  | Bid and Award Process for BTE at Hanford and Rough Grading at Livingston  |
| C950447-00-O | Paul A. LoBello |                 | 4/25/95  | Attendees for 20 April 1995 Requirements Update Meeting #1  |
| C950448-00-V | Irena Petrac    |                 | 5/5/95   | P.O. #PP161533 for LIGO Vacuum Equipment Design Competition (Phase A)/Clarification                                 |
| C950449-00-P | Paul Reardon    |                 | 4/13/95  | System Questions of Beam Tube Qualification and Subsequent Acquisition Strategy                                     |
| C950450-00-P | Paul Reardon    |                 | 4/13/95  | System Questions on Polishing Technology Demonstration/LIGO Pathfinder Test Masses (LIGO-C950051-00-P)              |
| C950451-00-P | Richard Speer   |                 | 4/24/95  | Certificate of Insurance for Diamond E. Trucking, Inc.  |
| C950452-00-P | James A. Beard  |                 | 4/19/95  | Revised Proposal, Revision 3 for RFP #KD-203 (LIGO-C950048-00-P)  |
| C950453-00-B | Marty Tellalian |                 | 4/25/95  | Change Order Request for Beam Tube Test Section Preparation and Shipment to Caltech                                 |
| C950454-00-P | Irena Petrac    |                 | 5/5/95   | Transmittal of P.O. #PP166240 for Review and Approval   |
| C950455-00-D | Irena Petrac    |                 | 5/8/95   | P.O. #PP161533 for LIGO Vacuum Equipment Design Competition (Phase A)/Clarification                                 |
| C950456-00-U | Irena Petrac    |                 | 5/8/95   | Transmittal of Requisition/P.O. #PP164701 (LIGO-C950356)  |
| C950457-00-O | Fred Asiri      | 950510-0        | 5/8/95   | TDM 95-07; BTE Constructability Study   |
| C950458-00-P | Irena Petrac    |                 | 5/9/95   | Notification of NSF of Current Status and Plans/HTES Contract #PP146525   |
| C950459-00-B | Marty Tellalian |                 | 5/8/95   | Non-Escort Privilege and Inspection Right Statement   |
| C950460-00-P | Linda Turner    |                 | 5/10/95  | Distribution of CDRL #PAR-FDCM002AA1M9504   |
| C950461-00-O | Jeff Hermann    | 950501-0        | 5/1/95   | Response to and Requested Clarifications for TDM 95-06  |
| C950462-00-O | Tyler Jackson   | 950501-0        | 4/28/95  | Minutes for Project Coordination Meeting of 28 April 1995   |
| C950463-00-O | Tyler Jackson   | 950504-0        | 5/4/95   | Minutes for Vibration and Acoustic Requirements Meeting of 4 May 1995   |
| C950464-00-P | Karen Sandberg  |                 | 5/4/95   | NSF Approval for P.O. PP157708 (Telos), P.O. PC162872 (Australian Nat'l Univ.), and P.O. PP162519 (REO)             |
| C950465-00-P | Earl Friese     |                 | 5/8/95   | Request for approval of P.O. #PP166240 (T.L. James Industrial Constructors, Inc.)                                   |
| C950466-00-P | Earl Friese     |                 | 5/8/95   | Request for Review and Ratification of Change Order #12 to MIT Subcontract  |
| C950467-00-V | John Worden     |                 | 5/11/95  | Response to questions raised on Vacuum Equipment  |
| C950468-00-V | John Worden     |                 | 5/11/95  | Response to questions raised on Vacuum Equipment  |
| C950469-00-B | Larry Jones     |                 | 5/16/95  | Beam Tube WBS   |
| C950470-00-B | Larry Jones     |                 | 5/17/95  | Termination of GPS/Concrete Testing   |
| C950471-00-O | Jeff Hermann    | 950508-0        | 5/8/95   | Minutes for Disposition of Cost Reduction Items Meeting held 3 May 1995   |
| C950472-00-V | John Worden     |                 | 5/9/95   | Directive for all letters and packages be FedExed to Vacuum Equipment contractors                                   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------|-----------------|----------|---|
| C950473-00-V | Tom Starr               |                 | 5/11/95  | Request for answers to questions raised on Vacuum Equipment   |
| C950474-00-U | McMaster-Carr Supp. Co. |                 |          |   |
| C950475-00-V | Paul A. LoBello         |                 | 5/16/95  | Contract Clarification, Vacuum Equipment, Phase A   |
| C950476-00-B | Ed Jasnow               |                 | 10/16/95 | RFP #KD 215 for LIGO Beam Tube Fabrication and Installation   |
| C950476-01-P | Ed Jasnow               |                 | 10/16/95 | Exhibit 1 - Deliverable Documentation for CBI Contract for LIGO Beam Tube Modules                                     |
| C950477-00-P |                         |                 | 5/18/95  | Proposal Instructions - BOILERPLATE   |
| C950478-00-P |                         |                 | 5/18/95  | Attachments to Proposal Instructions - Group A - BOILERPLATE  |
| C950479-00-P |                         |                 | 5/18/95  | Certifications - BOILERPLATE  |
| C950480-00-P |                         |                 | 5/18/95  | General Provisions - BOILERPLATE  |
| C950481-00-P |                         |                 | 5/18/95  | Additional General Provisions - BOILERPLATE   |
| C950482-00-P | McMaster-Carr Supp. Co. |                 |          |   |
| C950483-00-P | McMaster-Carr Supp. Co. |                 |          |   |
| C950484-00-P | Florence Gamble         |                 | 4/28/95  | Close Out of Purchase Order #PP146525 Between CIT and HighTech  |
| C950485-00-P | Mike T. Gamble          |                 | 5/9/95   | Technical and financial reports for months of April 1995 and May 1995   |
| C950486-00-P | Irena Petrac            |                 | 5/17/95  | Revised Paragraph from T.L. James Industrial Constructors, Inc.   |
| C950487-00-P | Doug Jungwirth          |                 | 5/18/95  | Sole Source Justification for Optical Research Associates (ORA)   |
| C950488-00-V | John Worden             |                 | 5/18/95  | Cancellation of Update 2 Meeting  |
| C950489-00-V | John Worden             |                 | 5/18/95  | Cancellation of Update 2 Meeting  |
| C950490-00-E | Irena Petrac            |                 | 5/20/95  | P.O. #PP167159 with CSIRO for Optics Polishing Technology Demonstration   |
| C950490-01-E | Irena Petrac            |                 | 1/23/96  | Change Order #1 for P.O. PC167159 with CSIRO - Changes Location of "Certification" Meeting                            |
| C950491-00-O | Tyler Jackson           | 950516-0        | 5/16/95  | Project LIGO Schedule annotated as of 5/16/95   |
| C950492-00-P | Irena Petrac            |                 | 5/19/95  | Clarifications and additional information on Land Clearing Site Proposal from T.L. James Industrial Contractors, Inc. |
| C950493-00-O | Charles Hinton          | 27649101A       | 5/15/95  | Request for additional administrative funding (\$6,500)   |
| C950494-00-P | Irena Petrac            |                 | 3/1/95   | P.O. #PC162519-Optics Coating Demo. attachment (done before LT/RT LIGO # coordination)                                |
| C950494-01-P | Irena Petrac            |                 | 6/29/95  | Change Order #1 for P.O. PC162519 for REO   |
| C950494-02-P | Irena Petrac            |                 | 9/29/95  | Change Order #2 to P.O. PC162519 for REO - Increase Scope   |
| C950495-00-I | Irena Petrac            |                 | 5/22/95  | Suggested Cover letter to transmit 2 copies of PO, one to be signed and returned to CIT                               |
| C950496-00-B | Larry Jones             |                 | 5/30/95  | Beam Tube Modules Detailed Design - Master Document List for Exhibit III for KD-215                                   |
| C950496-01-B | Larry Jones             |                 | 6/22/95  | Beam Tube Modules Master Document List for KD 215   |
| C950496-02-B | Larry Jones             |                 | 11/14/95 | Updated Beam Tube Modules Detailed Design - Master Document List  |
| C950496-03-B | Larry Jones             |                 | 12/4/95  | Updated Beam Tube Modules Detailed Design - Master Document List  |
| C950497-00-B |                         |                 | 5/23/95  | Project Safety Manual   |
| C950498-00-B |                         |                 | 5/23/95  | Quality Assurance manual  |
| C950499-02-B |                         |                 | 5/23/95  | Planned Approach to Leak Testing  |
| C950500-01-B |                         |                 | 5/23/95  | Planned Approach to Cleaning and Cleaning Maintenance for LIGO Project  |
| C950501-01-B |                         |                 | 5/23/95  | Material Traceability   |
| C950502-00-B |                         |                 | 5/23/95  | Environmental Plan  |
| C950503-00-B |                         |                 | 5/23/95  | Affirmative Action Program  |
| C950504-00-B |                         |                 | 5/23/95  | Hanford Livingston Summary Barchart   |
| C950505-00-B |                         |                 | 5/23/95  | Hanford Mobilization Logic Chart  |
| C950506-00-B |                         |                 | 5/23/95  | Beam Tube Module Logic Chart  |
| C950507-00-B |                         |                 | 5/23/95  | Hanford Final Inspection & Testing Logic Chart  |
| C950508-00-B |                         |                 | 5/23/95  | Detailed Hanford Schedule Activity List   |
| C950509-00-B |                         |                 | 5/23/95  | Detailed Livingston Schedule Activity List  |
| C950510-00-B |                         |                 | 5/23/95  | Management Responsibility   |
| C950511-00-B |                         |                 | 5/23/95  | Quality System  |
| C950512-00-B |                         |                 | 5/23/95  | Quality Plan  |
| C950513-00-B |                         |                 | 5/23/95  | Contract QAP's  |
| C950514-00-B |                         |                 | 6/23/95  | Pre-Contract Review   |
| C950515-00-B |                         |                 | 5/23/95  | Post-Award Review   |
| C950516-00-B |                         |                 | 5/23/95  | Preparation of Detail Drawings, Written Requisitions and Procurement Specifications                                   |
| C950517-00-B |                         |                 | 5/23/95  | Document Control  |
| C950518-00-B |                         |                 | 5/23/95  | Distribution of Detail Drawings, Written Requisitions and Procurement Specifications                                  |
| C950519-00-B |                         |                 | 5/23/95  | CBI Standards   |
| C950520-00-B |                         |                 | 5/23/95  | Contract QA Documents   |
| C950521-00-B |                         |                 | 5/23/95  | Customer Drawings   |
| C950522-00-B |                         |                 | 5/23/95  | Purchase Orders   |

| Document No  | Full Name      | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|----------------|-----------------|----------|---|
| C950523-00-B |                |                 | 5/23/95  | Vendor Survey   |
| C950524-00-B |                |                 | 5/23/95  | Vendor Assignment & Surveillance  |
| C950525-00-B |                |                 | 5/23/95  | Receipt of Customer Supplied Material   |
| C950526-00-B |                |                 | 5/23/95  | Material Control  |
| C950527-00-B |                |                 | 5/23/95  | Process Control   |
| C950528-00-B |                |                 | 5/23/95  | Welding Control   |
| C950529-00-B |                |                 | 5/23/95  | Heat Treating   |
| C950530-00-B |                |                 | 5/23/95  | Miscellaneous Process Control   |
| C950531-00-B |                |                 | 5/23/95  | Receiving Inspection  |
| C950532-00-B |                |                 | 5/23/95  | NDE, Inspection and Testing   |
| C950533-00-B |                |                 | 5/23/95  | Final Inspection  |
| C950534-00-B |                |                 | 5/23/95  | Calibration   |
| C950535-00-B |                |                 | 5/23/95  | Inspection and Test Status  |
| C950536-00-B |                |                 | 5/23/95  | Nonconformities   |
| C950537-00-B |                |                 | 5/23/95  | Corrective Action   |
| C950538-00-B |                |                 | 5/23/95  | Handling, Storage, Packaging and Shipping   |
| C950539-00-B |                |                 | 5/23/95  | Quality Records   |
| C950540-00-B |                |                 | 5/23/95  | Internal Auditing   |
| C950541-00-B |                |                 | 5/23/95  | Training  |
| C950542-00-I |                |                 | 5/18/95  | P.O. #PC162872 with Australia National University for Interferometric Motion Sensor   |
| C950543-00-I | Irena Petrac   |                 | 5/23/95  | Transmittal of PO #PC162872 with Australian National University for Interferometric Motion Sensor                                 |
| C950544-00-V | Tom Starr      | B30027          | 5/25/95  | Request for Clarifications  |
| C950545-00-O | Irena Petrac   |                 | 5/24/95  | Recommended Language for the Response to NSF letter of May 19, 1995 (to your attention)/LIGO Louisiana Site Clearing and Grubbing |
| C950546-00-V | Ed Jasnow      |                 | 5/25/95  | Request for Clarification - Vacuum Equipment (LIGO-C950322-00-V), FAX dated 23 May 1995   |
| C950547-00-V | Ed Jasnow      |                 | 5/24/95  | Request for Clarification   |
| C950548-00-B | Ed Jasnow      |                 | 5/24/95  | Notice to Exercise Option - Transmittal of RFP #KD-215 (LIGO-C950476-00-B), LIGO Beam Tube Fabrication and Installation           |
| C950549-00-B | Larry Jones    |                 |          | Modifications Required for Beam Tube Detailed Design  |
| C950550-00-B | Linda Turner   |                 | 5/22/95  | Distribution of CDRL # CBI-BTM004AC1C02-1   |
| C950551-00-B | Linda Turner   |                 | 5/22/95  | Distribution of CDRL # CBI-BTM004AC1C02-2   |
| C950552-00-O | Linda Turner   |                 | 5/22/95  | Distribution of CDRL #PAR-FDCM010AA1X01   |
| C950553-00-O | Tyler Jackson  | 950519-1        | 5/19/95  | Budget level estimates for pipeline crossing options 1 and 2 for Livingston site  |
| C950554-00-O | Tyler Jackson  | 950519-0        | 5/19/95  | Order for aerial photography of Livingston, LA area   |
| C950555-00-O | Tyler Jackson  |                 | 5/11/95  | Minutes of Facility Trade Study Coordination Meeting of 11 May 1995   |
| C950556-00-O | Tyler Jackson  |                 | 5/5/95   | Minutes of Project Coordination Meeting of 5 May 1995   |
| C950557-00-O | Tyler Jackson  | PM-950515-0     | 5/15/95  | Record of Phone Conversation re: Hanford Support Services   |
| C950558-00-O | Paul MacCalden | PM-950517-0     | 5/16/95  | Record of Phone Conversation re: LVEA Technical Foundation Concept  |
| C950559-00-V | J. Lombardo    |                 | 5/25/95  | Request for fully executed copy of Phase A contract and further questions about contract  |
| C950560-00-P | Irena Petrac   |                 | 5/26/95  | Ltr. to transmit PO #157708, Change Order 1, a copy, and "Statement of Support" for the PO - - - Linda, do you have a LIGO #      |
| C950561-00-P | Irena Petrac   |                 | 5/30/95  | Suspension and Suspension Noise for LIGO Test Masses/Funding (Moscow State University)  |
| C950562-00-B | Ralph Kelley   |                 | 5/24/95  | LIGO Project Gas Purge Welding Incident   |
| C950563-00-V | John Worden    |                 | 5/26/95  | Vacuum Equipment Phase A - Vibration  |
| C950564-00-V | John Worden    |                 | 5/26/95  | Vacuum Equipment Phase A - Vibration  |
| C950565-00-V | Ed Jasnow      |                 | 5/26/95  | Ltr. Responding to Fax dated May 16, 1995   |
| C950566-00-V | Ed Jasnow      |                 | 5/26/95  | Ltr. Responding to Fax dated May 16, 1995   |
| C950567-00-P | Irena Petrac   |                 | 5/26/95  | LIGO Optics/Metrology Support - Third Party Verification  |
| C950568-00-B | Linda Turner   |                 | 5/26/95  | Distribution of CDRL #PAR-FDCM010AC1A01   |
| C950569-00-D | Irena Petrac   |                 | 5/30/95  | Justification for P.O. #PP164701  |
| C950570-00-O | Tyler Jackson  | 950531-0        | 5/30/95  | Comments on CIT Beam Tube Enclosure Interface Document  |
| C950571-00-O | Mel Weingart   |                 | 3/15/96  | Revised Vacuum Equipment Electrical Stub-Up Locations.  |
| C950571-00-P | Irena Petrac   |                 | 6/1/95   | Source Selection Report on Procurement of Polishing Tech. Demo.for LIGO Optics (PO PP164701, LIGO-C950356-00-P)                   |
| C950571-A-O  |                |                 | 3/15/96  | THIS IS A TEST can be we modify?  |
| C950572-00-O | A. Rohay       |                 | 5/18/95  | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Summary Report                                       |
| C950572-01-O | A. Rohay       |                 | 12/23/95 | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site, Revision 1, dated 23 December 1995                    |
| C950572-02-O | A. Rohay       |                 | 1/3/96   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site, Revision 2, dated 3 January 1996                      |
| C950573-00-O | A. Rohay       |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix A: LIGO Site Time Series Plots              |
| C950574-00-O | A. Rohay       |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix B: LIGO Site 24-hour Spectrograms           |
| C950575-00-O | A. Rohay       |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix C: LIGO Site 24-hour Spectra                |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------|-----------------|----------|---|
| C950576-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix D: LIGO Site 24-hour Histograms                                     |
| C950577-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix E: LIGO Site Traffic Noise Plots                                    |
| C950578-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix F: LIGO Site 6am - 7am Plots  |
| C950579-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix G: LIGO Site Construction Noise Plots                               |
| C950580-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix H: LIGO Site Wind Noise Plots                                       |
| C950581-00-O | A. Rohay                |                 | 6/1/95   | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site - Appendix I: Large Structure/Wind Noise Plots                                 |
| C950582-00-R | Karen Sandberg          |                 | 5/30/95  | Award of Grant for "Suspension and Suspension Noise for LIGO Test Masses, Grant #PHY-9503642  |
| C950583-00-V | Ed Jasnow               |                 | 6/2/95   | Phase A Deliverables for Contract PP161532  |
| C950584-00-V | Ed Jasnow               |                 | 6/2/95   | Phase A Deliverables for Contract PP161533 - Clarification of Due Dates   |
| C950585-00-O | Linda Turner            |                 | 6/5/95   | Distribution of CDRL #PAR-FDCM002AA1M9505   |
| C950586-00-O | Tim Melott              |                 | 5/30/95  | Meeting Minutes for Livingston Rough Grading on Board Review  |
| C950587-00-P | Irena Petrac            |                 | 6/7/95   | Transmittal of P.O. PC1577708 - Basic AND Change Order #1   |
| C950587-06-P | Irena Petrac            |                 | 11/30/95 | Change Order #6 to P.O. PC 157708   |
| C950587-07-P | Irena Petrac            |                 | 3/14/96  | Change Order #7 for P.O. PC157708 with Telos - Extends Period of Performance through 30 November 1996   |
| C950587-08-P | Irena Petrac            |                 | 4/25/96  | Change Order #8 to P.O. PC157708 with Telos Information Systems - Addition of Valerie Beasley   |
| C950587-09-P | Irena Petrac            |                 | 6/26/96  | Change Order #9 for P.O. PC157708 with Telos Information Systems  |
| C950588-00-D |                         |                 | 6/8/95   | Exhibit I - List of Vendors - Attachment to HDOS P.O. # 164701 (LIGO-C950356-00-P)  |
| C950589-00-O | Keith Coleman           |                 | 6/8/95   | Acknowledgement Copy, fully executed for P.O. PP166240  |
| C950590-00-V | Paul A. LoBello         |                 | 6/8/95   | LIGO Vacuum Equipment, Phase A  |
| C950591-00-V | John Worden             |                 | 6/8/95   | Vacuum Equipment, Phase A - List of Technical Material  |
| C950592-00-O | Tyler Jackson           | 950605-0        | 6/5/95   | Client Project Assessment and Data Sheet  |
| C950593-00-O | Tim Melott              | 950602-0        | 6/2/95   | OSB Layout Meeting Minutes for 2 June 1995  |
| C950594-00-O | Tyler Jackson           | PM-950605-0     | 6/5/95   | Record of Telephone Conversation with Asiri/Hermann/Melott regarding BTE and Facilities Decisions   |
| C950595-00-O | Fred Asiri              | 950609-1        | 6/9/95   | TDM #09 - Guidelines for completion of theBTE Preliminary Design  |
| C950596-00-O | Fred Asiri              | 950608-0        | 6/5/95   | TDM- #08- Proceed with the Completion of the 100% Facility Concept Design based on new guidelines   |
| C950597-00-O | Tyler Jackson           | 950609-0        | 6/9/95   | IOC Review of TDM #05   |
| C950598-00-O | Tyler Jackson           | 950609-0        | 6/9/95   | Review of Vibration Requirements for LIGO Facilities  |
| C950599-00-O | Fred Asiri              |                 | 6/13/95  | Transmittal of CBI documentation (drawings and procedures)  |
| C950600-00-D | Irena Petrac            |                 | 6/14/95  | Review and Approval of P.O. PP167159 with CSIRO for Optics Polishing Technology Demonstration (LIGO-C950490-00-E)   |
| C950601-00-D | Irena Petrac            |                 | 6/15/95  | Transmittal of PO #PP167159 (LIGO-C950490-00-E) for review & approval - Optics Polishing Technology Demonstration   |
| C950602-00-P | Irena Petrac            |                 | 6/15/95  | Suggested letter to NSF re. Review and Approval for Contract #PP164701 (LIGO-C950356-00-P) and justification  |
| C950603-00-O | Tyler Jackson           | 950614-0        | 6/14/95  | Completion of Final Concept Meeting Minutes for 14 June 1995  |
| C950604-00-O | Tyler Jackson           | 950612-0        | 6/12/95  | Beam Tube Enclosure, Basis of Design, Working Draft, dated 9 June 1995  |
| C950605-00-O | Tyler Jackson           | 950609-1        | 6/9/95   | Final Concept Cost Estimate Meeting Minutes for 9 June 1995   |
| C950606-00-O | Tyler Jackson           | 950613-0        | 6/13/95  | Project Coordination Meeting Minutes for 12 June 1995   |
| C950607-00-O | Tyler Jackson           | PM-950613-0     | 6/13/95  | Record of Telephone Conversation with Asiri/Hermann/Melott regarding Concept Completion and Interfaces  |
| C950608-00-O |                         |                 | 5/11/95  | Livingston Aerial Photos  |
| C950609-00-P | Irena Petrac            |                 | 6/19/95  | Legal Review of LIGO subcontract for Optics Technology Demonstration with CSIRO (P.O. #PP167159, LIGO-C950490-00-E)                                       |
| C950610-00-P | Linda Turner            |                 | 6/20/95  | Distribution of CDRL #CBI-VE001AA1A01-1   |
| C950611-00-V | Linda Turner            |                 | 6/20/95  | Distribution of CDRL #CBI-VE001AA1A01-2   |
| C950612-00-V | Linda Turner            |                 | 6/20/95  | Distribution of CDRL #CBI-VE002AA1A01   |
| C950613-00-P | Linda Turner            |                 | 6/20/95  | Distribution of CDRL #CBI-VE003AA1A01   |
| C950613-00-V | Linda Turner            |                 | 6/16/95  |   |
| C950614-00-B | George H. Stokes        |                 | 7/14/95  |   |
| C950614-00-R | Irena Petrac            |                 | 6/22/95  | P.O. PP169604 with Moscow State University (MSU) for Scientific Collaboration   |
| C950614-01-R | Irena Petrac            |                 | 3/14/96  | Change Order #1 for P.O. PC169604 with International Science Foundation (ISF) - Continuation of Research Collaboration with Moscos State University (MSU) |
| C950615-00-P | Linda Turner            |                 | 6/21/95  | Distribution of CDRL #PSI-VE001AA1A01   |
| C950616-00-P | Linda Turner            |                 | 6/21/95  | Distribution of CDRL #PSI-VE001AB1A01   |
| C950617-00-P | Linda Turner            |                 | 6/21/95  | Distribution of CDRL #PSI-VE002AA1A01   |
| C950618-00-P | Linda Turner            |                 | 6/21/95  | Distribution of CDRL #PSI-VE003AA1A01   |
| C950619-00-P | Prof. Charles Peck      |                 | 6/21/95  | LIGO Supplemental Proposal for \$37,679 - June 1995   |
| C950620-00-B | Ed Jasnow               |                 | 6/22/95  | Addendum #1 to RFP KD 215 (LIGO-C950476-00-P) for Beam Tube Modules   |
| C950621-00-R | McMaster-Carr Supp. Co. |                 | 2/21/95  |   |
| C950622-00-R | McMaster-Carr Supp. Co. |                 |          |   |
| C950623-00-V | John Worden             |                 | 6/16/95  | Agendas for Vacuum Equipment Preliminary Design Reviews, 26-27 June 1995  |
| C950624-00-P | Sandi Swarthout         |                 | 6/21/95  | Acknowledgement Copy of P.O. PC162872 with Australian National University (ANU)   |
| C950625-00-O | Tim Melott              | 950614-1        | 6/22/95  | Minutes of Meeting re Caltech's Input to 100% Concept, 14 June 1995   |



| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| C950626-00-O | Tim Melott              | 950615-0        | 6/22/95 | Minutes of Meeting re. Caltech's Input to 100% Concept (second meeting), 15 June 1995   |
| C950627-00-O | Tyler Jackson           |                 | 6/12/95 | Livingston Aerial Color Photos  |
| C950628-00-O | Jeff Hermann            | 950623-0        | 6/23/95 | Weekly Report   |
| C950629-00-O | John James Blasius      | B3-01-08        | 6/16/95 | LIGO Trip Report - Livingston, 5-7 June 1995  |
| C950630-00-P | Dr. Chris Walsh         |                 | 6/27/95 | Comments on P.O. PP167159 and Attachments for the LIGO Project  |
| C950631-00-I | Irena Petrac            |                 | 6/28/95 | Advance copy of Change Order 1 for P.O. PP162519 with REOI  |
| C950632-00-P | Irena Petrac            |                 | 6/28/95 |   |
| C950633-00-P | Linda Turner            |                 | 6/29/95 | Incomplete Signature Copy of P.O. PC162519 (LIGO-C950494-00-I)  |
| C950634-00-B | Ed Jasnow               |                 | 6/29/95 | Addendum #2 for RFP KD 215 - Itemized List of Needed Changes to the Detailed Design   |
| C950635-00-P | Juliann McCrandall      | OPT052395-04124 | 6/19/95 | Transmittal of Signed copy of P.O. PC162519 (LIGO-C950494-00-I)   |
| C950636-00-D | Garilynn Billingsley    |                 | 6/28/95 | Serial Number for LIGO Pathfinder Optic Being Polished at REOI  |
| C950637-00-B | Larry Jones             |                 | 6/15/95 | Required Changes for Detailed Design, DRAFT   |
| C950638-00-P | Irena Petrac            |                 | 6/30/95 | Change Order #4 to P.O. PP146525 for Concurrence  |
| C950639-00-I | Doug Jungwirth          |                 | 6/19/95 | Proposed Plan for the Metrology I Task for the Pathfinder Process   |
| C950640-00-O | Yolande Middleton       | 950630-1        | 6/30/95 | LIGO Project Facilities Concept   |
| C950641-00-P | Sandi Swarthout         |                 | 6/21/95 |   |
| C950642-00-O | Jeff Herrman            | 950522-0        | 5/23/95 | Response to TDM 95-07 and Addendum to CDRL 10, DRD 4  |
| C950643-00-O | Larry Campbell          |                 | 5/25/95 | Certificate of Completion for P.O. PC119673 with Selland Construction, Inc.   |
| C950644-00-O | Richard H. Door         |                 | 5/19/95 | LIGO Rough Grading Final Report for Contract Closeout   |
| C950645-00-P | Mike Harrington         | WR 120          | 3/1/95  | Quotation from Perkin Elmer and Collaboration Proposal in Association with Transcription Factor Research Center   |
| C950646-00-P | Irena Petrac            |                 | 7/6/95  | Review of Change Order #4 for P.O. PP146525 with High Technology Engineering Services (HTES)  |
| C950647-00-P | Eleanor Griffin         |                 | 7/6/95  | Underwriting Questions  |
| C950648-00-B | Paul A. LoBello         |                 | 7/7/95  | Advance Copy of Clarifications and Exceptions to the General Provisions and Additional General Provisions Included in Proposal for RFP KD 215 (LIGO-C950476-00-B) |
| C950649-00-O | John Kelly              |                 | 7/7/95  | Review of Rough Grading Preliminary Design Report - Livingston  |
| C950650-00-O | Tim Melott              | 950629-0        | 6/29/95 | Minutes of Meeting re Hanford Site Vist, 29 June 1995   |
| C950651-00-O | Tyler Jackson           | 9500630-0       | 6/30/95 | Bid Package Coordination Meeting Minutes, 30 June 1995  |
| C950652-00-O | Ara Arman               |                 | 7/10/95 | Update of Livingston Land Clearing  |
| C950653-00-V | Ed Jasnow               |                 | 7/10/95 | Test Mass Chambers (TMC) to be Replaced by Beam Splitter Chambers (BSC)   |
| C950654-00-V | Ed Jasnow               |                 | 7/10/95 | Test Mass Chambers (TMC) to be Replaced by Beam Splitter Chambers (BSC)   |
| C950655-00-O | John Kelly              | 92185           | 7/11/95 | Review of Rough Grading Preliminary Design Report; Check Effect of Profile Change on Earthwork Quantities   |
| C950666-00-V | Richard Bagley          |                 |         |   |
| C950667-00-P | Linda Turner            |                 | 7/12/95 | Distribution of CDRL #PSI-VE001AA1A01-ADD   |
| C950668-00-O | Rirchard Fischer        |                 | 7/12/95 | Addition of LSU to Caltech's Insurance Coverage   |
| C950669-00-P | Ray Yuen                |                 | 7/12/95 | 7/12/95 MIT Fax Rquest for Foreign Travel Approval  |
| C950670-00-O | Linda Turner            |                 | 7/12/95 |   |
| C950671-00-V | Paul A. LoBello         |                 | 7/13/95 |   |
| C950672-00-B | Larry Jones             |                 | 7/13/95 | Address Change and Task Order 95-03 for QT Module Vacuum Maintenance and Testing  |
| C950674-00-P | Irena Petrac            |                 | 7/13/95 |   |
| C950675-00-U | Irena Petrac            |                 | 7/14/95 |   |
| C950676-00-U | Irena Petrac            |                 | 7/14/95 |   |
| C950677-00-O | Tim Melott              | PM-950713-0     | 7/13/95 | Record of Telephone Conversation with Fred Asiri re. Rough Grading, Livingston  |
| C950678-00-O | John Kelly              | 92185           | 7/14/95 | Review of Rough Grading Preliminary Design Report; Study of Optimum Freeboard Criteria - Livingston   |
| C950679-00-D | Ramin Lalezari          |                 | 7/17/95 | Minutes for 2 June 1995 Kick-off Meeting at REOI  |
| C950680-00-M | Robert Hawthorne, Esq.  | 12982-0         | 6/21/95 | State Tax Issue - Livingston  |
| C950681-00-M | Robert Hawthorne, Esq.  | 12982-0         | 6/28/95 | Memorandum of Lease Describing LIGO Project Site - Livingston   |
| C950682-00-M | Robert Hawthorne, Esq.  | B0192303        | 6/28/95 | State Tax Issues - Livingston   |
| C950683-00-M | Graham H. Fernald, Esq. |                 | 6/30/95 | Summary of Tax-Related Issues and Options for Organizing and Operating for Tax Considerations - Hanford Site  |
| C950684-00-P | Irena Petrac            |                 | 7/18/95 | Suggested letter for transmittal of P.O. #PP045667, Change Order 14   |
| C950684-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| C950685-00-P |                         |                 | 7/18/95 | LIGO Insurance Meeting of 17 July 1995 with Voller, Savage & Associates   |
| C950685-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| C950686-00-P | Ed Holmes               |                 | 7/18/95 | Interest in bidding for LIGO Project in Livingston  |
| C950686-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| C950687-00-O | Tyler Jackson           |                 | 7/18/95 | Minutes of Weekly Coordination Meeting Kickoff  |
| C950687-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| C950688-00-D | Jean Siomkos            | CD-JMS-2565     | 7/17/95 | Request for Rent-Free Use of AXAF Equipment   |
| C950688-00-U | McMaster-Carr Supp. Co. |                 |         |   |

| Document No  | Full Name                  | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|----------------------------|-----------------|----------|---|
| C950689-00-D | Jean Siomkos               | CD-JMS-2566     | 7/18/95  | Transmittal of acknowledgement copy of P.O. PC164701 with HDOS  |
| C950689-00-U | McMaster-Carr Supp. Co.    |                 |          |   |
| C950690-00-P |                            |                 | 7/20/95  | Latest input from CSIRO for proposal changes  |
| C950691-00-P | Earl Friese                |                 | 7/20/95  | Alternate Wording for Extension of P.O. PC139071 for Richard Fischer  |
| C950692-00-P | Irena Petrac               |                 | 7/20/95  | Request for Rent-Free AXAF Equipment for HDOS   |
| C950693-00-O | Arthur Theis               |                 | 7/13/95  | H&H Report Regarding the Freeboard for the Embankment Elevation, Livingston   |
| C950694-00-O | Rex Jordan                 |                 | 7/20/95  | Fire Hydrant Information, Hanford   |
| C950695-00-V | Ed Jasnow                  |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950695-00-V | K. Johnson                 |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950695-00-V | Allen Sibley               |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950695-00-V | Mike Zucker                |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950695-00-V | Mark Coles                 |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950695-00-V | John Worden                |                 | 7/19/95  | Vacuum Equipment, Phase B Proposal Evaluation Report - CALTECH DISCREET   |
| C950696-00-P | W. Kent Higgins, President |                 | 7/18/95  | Fixed Price Quotation to Modify PSI's Fixed Price Proposal (CDRL 03)  |
| C950697-00-P | Anthony Favalaro           |                 | 7/20/95  | Budget Allocation Explanation and Indirect Rates  |
| C950698-00-O | Tyler Jackson              | 950714-0        | 7/14/95  | Construction Bid Documents Meeting Minutes for 13 July 1995   |
| C950699-00-O | Marshall Long              |                 | 7/5/95   | Area of Wall Absorbing Panels - Calculations on Reverberation Times   |
| C950700-00-P | Ramin Lalezari             |                 | 7/24/95  | Project Status Meeting Minutes for 20 July 1995   |
| C950702-00-O | Fred Asiri                 |                 | 7/25/95  | TDM 95-10 - Authorization to Proceed with Phase-B Detailed Design Task  |
| C950703-00-B | Paul A. LoBello            |                 | 7/21/95  | Proposal and Bid for RFP KD 215, Beam Tube Modules Fabrication and Installation   |
| C950704-00-P | Stefanie Malkenhorst       |                 | 7/25/95  | Shipping OPTI CAL Component to Sydney, Australia  |
| C950705-00-O | Tyler Jackson              | 950720-1        | 7/20/95  | Phase B Final Design Forecast   |
| C950706-00-P | Earl Friese                |                 | 7/20/95  | Approval of Subcontract & Change Orders to HTES   |
| C950707-00-P | Earl Friese                |                 | 7/19/95  | Approval of Chg Order 1 for AIM   |
| C950708-00-D | Irena Petrac               |                 | 7/27/95  | Recommended letter for approval of CSIRO P.O. #PP167159 - Optic Polishing   |
| C950709-00-O | Fred Asiri                 |                 | 7/28/95  | TDM 95-11 - Authorization to Proceed with Completion of Preliminary Design of the BTE Based on Attached Interface Drawings                                    |
| C950710-00-O | Paul Weickert              |                 | 7/19/95  | Review of 100% Facility Concept Design by Parsons - Hanford and Livingston  |
| C950710-00-O | John Kelly                 |                 | 7/19/95  | Review of 100% Facility Concept Design by Parsons - Hanford and Livingston  |
| C950711-00-O | Tyler Jackson              | 950724-0        | 7/24/95  | Weekly Coordination Meeting Minutes for 24 July 1995  |
| C950712-00-O | Tyler Jackson              | 950717-0        | 7/17/95  | Weekly Coordination Kickoff Meeting Minutes for 17 July 1995  |
| C950713-00-P | Paul A. LoBello            |                 | 7/28/95  | Supplementary Proposal for RFP KD 215 - Beam Tube Modules, Fabrication and Installation - Incorporation of Module Insulation, Bakeout, and Acceptance Testing |
| C950714-00-P | Richard Mc Clearen         | GP54B-95-313    | 7/27/95  | Rent-Free, Non-Interference Use of AXAF/MSFC Property   |
| C950715-00-V | John Worden                |                 | 7/31/95  | Transmittal of Draft Vacuum Equipment Specification, Revision 2   |
| C950716-00-O | Verdi Adam                 |                 | 7/25/95  | LIGO Project Construction Inspection Services   |
| C950717-00-O | Otto Matherny              |                 | 7/31/95  | Transmittal of D950100-00-D and D950101-C-D   |
| C950718-00-D | Ramin Lalezari             |                 | 7/25/95  | Transparencies/Presentation of 20 July 1995 Meeting with REOI   |
| C950719-00-V | John Worden                |                 | 7/31/95  | Transmittal of Parsons 100% Concept Design  |
| C950720-00-P | Irena Petrac               |                 | 7/31/95  | AXAF/MSFC property  |
| C950721-00-D | Andreas Nonnenmacher       |                 | 8/1/95   | Preliminary Agenda for Meeting with HDOS on 3 August 1995   |
| C950722-00-B | Larry Jones                |                 | 8/1/95   | Beam Tube Proposal Evaluation   |
| C950723-00-V | John Worden                |                 | 8/1/95   | Summary of Vacuum Equipment Specification, Rev. 2   |
| C950724-00-V | John Worden                |                 | 8/1/95   | Insulation Supplier Information   |
| C950725-00-V | John Worden                |                 | 8/3/95   | Sketch and Contact for Avalab Super-Insulation  |
| C950726-00-V | John Worden                |                 | 8/3/95   | Beam Tube Anchor Concept  |
| C950727-00-V | John Worden                |                 | 8/4/95   | Sketch Clarifications for Corner Station and Small Roots Pump   |
| C950728-00-V | John Worden                |                 | 8/11/95  | Agenda for Vacuum Equipment Meeting, 16 August 1995   |
| C950729-00-V | John Worden                |                 | 9/18/95  | Questions re Valve and Beam Tube Termination  |
| C950730-00-V | John Worden                |                 | 10/5/95  | PDR Update Action Items - Unedited  |
| C950731-00-V | John Worden                |                 | 10/15/95 | Vacuum Equipment Agreements and Commitments with PSI  |
| C950732-00-V | John Worden                |                 | 10/15/95 | Technical Information Memorandum (TIM) - Request for Quotes   |
| C950733-00-V | Tom Starr                  |                 | 8/1/95   | Specification Revision Questions  |
| C950734-00-D | Jean Siomkos               | CD-JMS-2574     | 8/1/95   | LIGO Mirror Blank   |
| C950735-00-B | Larry Jones                |                 | 7/26/95  | Initial Evaluation of CBI Proposal  |
| C950736-00-P | Jackie LaFever             |                 | 8/1/95   | Proposal for Services of Peggy Simpson, P.O. #PP157708  |
| C950737-00-O | Fred Asiri                 |                 | 8/1/95   | TDM 95-12, Proceed with Completion of Final Design for Rough Grading, LA  |
| C950738-00-V | Tom Starr                  |                 | 8/2/95   | Telephone conference regarding Specification Revisions on 1 August 1995   |
| C950739-00-V | Ed Jasnow                  |                 | 8/3/95   | Notification of non-Selection for Phase B   |

| Document No  | Full Name                  | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|----------------------------|-----------------|---------|---|
| C950740-00-V | Ed Jasnow                  |                 | 8/3/95  | Notification of Selection for Phase B, Vacuum Equipment   |
| C950741-00-O | Tyler Jackson              | 950728-1        | 7/28/95 | Construction Bid Documents - Meeting Minutes for 28 July 1995                                     |
| C950742-00-O | Tyler Jackson              |                 | 7/27/95 | Phase B Programatic Kick-Off Meeting Minutes for 27 July 1995                                     |
| C950743-00-O | Tim Melott                 | 950728-2        | 7/28/95 | Depth of Exterior Walls - Meeting Minutes for 28 July 1995  |
| C950744-00-O | Tyler Jackson              |                 | 7/31/95 | Minutes for Weekly Coordination Meeting of 31 July 1995   |
| C950745-00-O | Tyler Jackson              | 950801-1        | 7/31/95 | Construction Bid Documents - Meeting Minutes for 31 July 1995                                     |
| C950746-00-O | Tyler Jackson              | 950731-0        | 7/31/95 | Work Plan for Phase B and Rejection of TDM 95-10  |
| C950747-00-O | Tyler Jackson              | 950801-0        | 8/1/95  | Rejection of TDM 95-11  |
| C950748-00-O | Bruce Etzel                |                 | 8/4/95  | Electrical Service Cost Scenarios, Hanford  |
| C950749-00-P | Paul A. LoBello            |                 | 8/4/95  | Proposal Revisions for RFP KD 215   |
| C950750-00-B | Ed Jasnow                  |                 | 8/4/95  | Request for Pricing for Fabrication/Installation of Baffles per Drawing                           |
| C950751-00-O | Frank D. Dallas            |                 | 8/2/95  | Proposal to LIGO for Electrical Power Service   |
| C950752-00-P | Jean Siomkos               | CD-JMS-2578     | 8/8/95  | Request for Rent Free Use of Calibration Flats  |
| C950753-00-D | Jean Siomkos               |                 | 8/8/95  | Meeting Minutes and Presentation Materials of 3 August 1995                                       |
| C950754-00-B | Marty Tellalian            |                 | 8/7/95  | Task Orders #95-02 and #95-03   |
| C950754-00-O | S. Smart                   |                 | 8/9/95  | Livingston Site Rough Grading Contract Preparation for Bidders/Advertisement                      |
| C950755-00-P | Richard S. Neuman          |                 | 8/9/95  | Scope of Work and Cost Estimate for Pipe Replacement and Recoat for LIGO Encroachment, Livingston |
| C950756-00-O | Tyler Jackson              | 950807-2        | 8/7/95  | Acceptance & Signature for TDM 95-12 and updated table for grading analysis                       |
| C950757-00-O | Tim Melott                 | 950802-0        | 8/7/95  | Electrical Scope Meeting Minutes of 2 August 1995   |
| C950758-00-O | Tim Melott                 | 950801-2        | 8/7/95  | Meeting Minutes of Tabletop Review of the Concept Approval Drawings, 1 August 1995                |
| C950759-00-O | Tyler Jackson              |                 | 8/9/95  | Safety Research Plan and Estimate   |
| C950760-00-O | Fred Asiri                 |                 | 8/9/95  | CIT/Parsons Weekly Meeting Minutes for 8 August 1995  |
| C950761-00-O | Andrew Navarre             |                 | 8/10/95 | Proposed Design and Cost for LIGO Crossing  |
| C950762-00-O | Tyler Jackson              |                 | 8/10/95 | Revised Bid and Award Task Plan for Rough Grading and BTE - Livingston                            |
| C950763-00-O | Fred Asiri                 |                 | 8/10/95 | Parson's Baseline Man-hour Budget for Phase B   |
| C950764-00-O | Tyler Jackson              | 950807-0        | 8/8/95  | Weekly Coordination Meeting Minutes for 7 August 1995   |
| C950765-00-O | Tyler Jackson              | PM-950808-0     | 8/8/95  | Record of Telephone Conversation re Davis Bacon Wage Determination Data                           |
| C950766-00-O | Tyler Jackson              | 950708-0        | 7/8/95  | Scope of Work (SOW) for Spot Elevation Survey - Livingston  |
| C950767-00-O | Tyler Jackson              | 950707-0        | 7/8/95  | Minutes of Concept Estimate Preissue Review on 7 July 1995  |
| C950768-00-O | Tim Melott                 | 950630-1        | 7/6/95  | Hanford Services Interface Meeting Minutes for 30 June 1995                                       |
| C950769-00-P | Robert Powell              |                 | 8/11/95 | Confirmation of Meeting and Attendees for 16 August 1995  |
| C950770-00-P | Linda Turner               |                 | 8/10/95 | Distribution of CDRL PAR-FDCM010AB1B03 and PAR-FDCM010AB2B03                                      |
| C950771-00-P | George H. Stokes           |                 | 8/8/95  | Request to Expedite Invoice Processing  |
| C950772-00-O | Randy Carbone              | 950803-0        | 8/3/95  | Transmittal of AutoCAD Files  |
| C950773-00-O | Tyler Jackson              | 950811-0        | 8/11/95 | Minutes of Technology Analysis Plans Meeting on 10 August 1995                                    |
| C950774-00-D | Garilynn Billingsley       |                 | 8/14/95 | Return of Coating Samples, Closure of Action Item #6  |
| C950775-00-O | Jeff Hermann               | 950808-0        | 8/10/95 | Minutes for Beam Tube Enclosure Meeting - Emergency Egresses & General Safety, 8 August 1995      |
| C950776-00-O | Michael Loden              |                 | 8/9/95  | Storm Water Discharge Permit, P.O. PP092591   |
| C950777-00-V | Sandy Pool                 |                 | 7/29/95 | Signature Sheet and Souce Selection Report for Vacuum Equipment, Phase B                          |
| C950777-00-V | Gary Sanders               |                 | 7/29/95 | Signature Sheet and Souce Selection Report for Vacuum Equipment, Phase B                          |
| C950777-00-V | Bill Althouse              |                 | 7/29/95 | Signature Sheet and Souce Selection Report for Vacuum Equipment, Phase B                          |
| C950777-00-V | Dr. Paul C. Jennings       |                 | 7/29/95 | Signature Sheet and Souce Selection Report for Vacuum Equipment, Phase B                          |
| C950777-00-V | Barry Barish               |                 | 7/29/95 | Signature Sheet and Souce Selection Report for Vacuum Equipment, Phase B                          |
| C950778-00-O | Arthur Theis               |                 | 8/15/95 | LIGO Contract Fund Modifications for P.O. PP092591  |
| C950779-00-O | Fred Asiri                 |                 | 8/15/95 | Revised Bid and Award Task Plan for Rough Grading and Hanford BTE                                 |
| C950780-00-V | W. Kent Higgins, President |                 | 8/15/95 | LIGO Change Order - Revised Firm Fixed Price Quotation for Proposal (CDRL 03)                     |
| C950781-00-D | Jean Siomkos               | CD-JMS-2581     | 8/15/95 | LIGO Weekly Status Report, Week Ending 11 August 1995   |
| C950782-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM005AA1A01  |
| C950783-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM005AA2A01  |
| C950784-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM005AA3A01  |
| C950785-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM005AA4A01  |
| C950786-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM005AA5A01  |
| C950787-00-O | Linda Turner               |                 | 8/16/95 | Distribution of CDRL PAR-FDCM006AA1A01  |
| C950788-00-O | Linda Turner               |                 | 8/14/95 | Distribution of CDRL PAR-FDCM006AA2A01  |
| C950789-00-O | Linda Turner               |                 | 8/14/95 | Distribution of CDRL PAR-FDCM006AA3A01  |
| C950790-00-O | Linda Turner               |                 | 8/14/95 | Distribution of CDRL PAR-FDCM006AA4A01  |
| C950791-00-O | John Carusiello            | 2026            | 8/16/95 | Quotation for Baffle A and Baffle B   |

| Document No  | Full Name            | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|----------------------|-----------------|----------|---|
| C950792-00-D | Ramin Lalezari       |                 | 8/16/95  | Proposal for Construction of Cleaning Facility for Pathfinder Coating                           |
| C950793-00-O | Fred Asiri           |                 | 8/14/95  | Caltech Parsons Weekly Meeting Minutes for 14 August 1995                                       |
| C950794-00-O | Tyler Jackson        | 950815-0        | 8/15/95  | Weekly Coordination Meeting Minutes for 14 August 1995  |
| C950795-00-B | Larry Jones          |                 | 8/18/95  | Summary of Outstanding Issues on CBI's Proposal   |
| C950796-00-B | John Batel           | 1020            | 8/18/95  | Quotation for Baffles   |
| C950797-00-O | Tyler Jackson        |                 | 8/18/95  | Plan and Tasks for Rough Grade Bid and Award, Livingston  |
| C950798-00-B | Ed Jasnow            |                 | 8/18/95  | Issues re Beam Tube Module Procurement (LIGO-C950476-00-P)                                      |
| C950799-00-D | Garilynn Billingsley |                 | 8/18/95  | TDM 95-001 to CSIRO   |
| C950800-00-D | Garilynn Billingsley |                 | 8/18/95  | TDM 95-002 to CSIRO   |
| C950801-00-B | Marty Tellalian      |                 | 8/18/95  | Tube Section Shipping Covers  |
| C950802-00-F | Tyler Jackson        |                 | 8/14/95  | ECP 1 - BTE Safety Data Collection and Report and Change Management Process                     |
| C950803-00-D | Julie Lee            |                 | 8/18/95  | Signed P.O. PP155642 with Optical Research Associates   |
| C950804-00-V | Ed Jasnow            |                 | 8/21/95  | Contract for Vacuum Equipment with PSI, P.O. PC175730   |
| C950804-01-V | Ed Jasnow            |                 | 11/1/95  | Change Order #1 for P.O. PC175730 with PSI - Incorporation of Technical Changes                 |
| C950804-03-V | John Worden          |                 | 12/11/95 | Change Order #3 to Contract # PC175730 to Provide for Gate Valves                               |
| C950804-04-V | Ed Jasnow            |                 | 2/8/96   | Change Order #4 for P.O. PC175730 with PSI for Incorporation of Technical Changes               |
| C950805-00-O | Frank D. Dallas      |                 | 8/17/95  | Electrical Power Cost Estimates   |
| C950806-00-O | G.R. Speer           |                 | 8/16/95  | Pay Request #2 for T.L. James Industrial Contractors for Site Preparation                       |
| C950807-00-D | Karl Reithmaier      |                 | 8/21/95  | Estimate for Tasks and a Partial Layout of the Tilt Table                                       |
| C950808-00-D | Dr. Harry H. Bauer   |                 | 8/22/95  | IBS Coatings Uniformity   |
| C950809-00-V | Richard Bagley       |                 | 8/21/95  | LIGO Vacuum Equipment Progress Payments Schedule  |
| C950810-00-O | Fred Asiri           |                 | 8/22/95  | Conditional Approval of CDRL PAR-FDCM010AB1B03  |
| C950811-00-O | Ed Jasnow            |                 | 8/22/95  | LIGO Acceptance of Proposal for Ground Surveying, Livingston                                    |
| C950812-00-O | Otto Matherny        |                 | 8/23/95  | Power Requirements at LIGO Site - Hanford   |
| C950813-00-O | Otto Matherny        |                 | 8/23/95  | Power Requirements for LIGO SITE - Hanford  |
| C950814-00-O | Mark Coles           |                 | 8/23/95  | Lightning Protection and Proposal Request   |
| C950815-00-O | Tyler Jackson        | 950821-0        | 8/21/95  | Beam Tube Enclosure Safety and Number of Emergency Exits  |
| C950816-00-O | Tim Melott           | 950816-0        | 8/23/95  | Livingston Rough Grading Final Design Review Meeting Minutes, 8/16&18/95                        |
| C950817-00-O | Tyler Jackson        | 950822-1        | 8/21/95  | Minutes of Meeting re Construction Bid Documents, 21 August 1995                                |
| C950818-00-D | David Hasenauer      |                 | 8/23/95  | LIGO Layouts  |
| C950819-00-O | Fred Asiri           |                 | 8/21/95  | Caltech/Parsons Meeting Minutes, 21 August 1995   |
| C950820-00-P | Irena Petrac         |                 | 8/24/95  | Change Order  |
| C950821-00-O | Tyler Jackson        | 950822-0        | 8/21/95  | Weekly Coordination Meeting Minutes of 21 August 1995   |
| C950822-00-V | Richard Bagley       |                 | 8/24/95  | Review Comments from PSI on SOW (LIGO-C950330-00-P)   |
| C950823-00-P | Irena Petrac         |                 | 8/24/95  | Insurance Certificate/Telos Support Services Subcontract (PC 157708)                            |
| C950824-00-O | Christine Vige       |                 | 8/24/95  | Request to Bid for Proposed Rough Grading Contract in Livingston, LA                            |
| C950825-00-P | Sandy Pool           |                 | 8/28/95  | Close-Out of P.O. PP146525 between Caltech and High Technology Engineering Services, Inc.       |
| C950826-00-O | Tim Melott           | 950823-0        | 8/23/95  | LVEA Layout Meeting Minutes for 23 August 1995  |
| C950827-00-O | Fred Asiri           |                 | 8/29/95  | Review of CDRL Rough Grading Contractor's Bid Package   |
| C950828-00-O | Fred Asiri           |                 | 8/29/95  | Rough Grading for Hydrological/Drainage Compliance Review                                       |
| C950829-00-O | Tyler Jackson        |                 | 8/23/95  | Minutes for Meeting re Construction Bid Documents   |
| C950830-00-O | Fred Asiri           | 950907-0        | 8/31/95  | TDM 95-13, RE:Authorizes completion of BTE  |
| C950831-00-O | Fred Asiri           |                 | 9/6/95   | CALTECH/PARSONS WEEKLY MEETING MINUTES FOR 5 September 1995                                     |
| C950832-00-P | Ed Jasnow            |                 | 9/1/95   | Proposed Contract for Vacuum Equipment (LIGO-C950804-00-V)                                      |
| C950833-00-O | Yolande Middleton    | 950831-0        | 8/31/95  | Transmittal of CDRL PAR-FDCM010AE1X01 (PDR BTE Meeting Minutes)                                 |
| C950834-00-O | Jeff Herrman         |                 | 8/30/95  | Transmittal of Advance Copy of CDRL PAR-FDCM010AE1X01   |
| C950835-00-O | Linda Turner         |                 | 9/6/95   | Transmittal of TDM 95-13 (LIGO-C950830-00-O)  |
| C950836-00-P | Jackie LaFever       |                 | 9/6/95   | Proposal for Contract Labor Services of William Young   |
| C950837-00-O | Tyler Jackson        | 950830-0        | 8/30/95  | Beam Tube Enclosure Emergency Egress Requirement  |
| C950838-00-O | Tyler Jackson        | 950829-0        | 8/30/95  | Response to CIT comments on Phase B Workplan  |
| C950839-00-P | Linda Turner         |                 | 9/6/95   | Distribution of CDRL PAR-FDCM002AA1M9508  |
| C950840-00-B | Marty Tellalian      |                 | 8/21/95  | RGA Software Procurement, Installation and Evaluation   |
| C950841-00-B | Marty Tellalian      |                 | 8/21/95  | Change Order Request for RGA Software Procurement and Evaluation                                |
| C950842-00-P | Irena Petrac         |                 | 9/1/95   | P.O. PP173021 - contract with Tufts University/Dr. Sliwa  |
| C950843-00-O | Tyler Jackson        | 950829-0        | 8/29/95  | Weekly Coordination Meeting Minutes for 28 August 1995  |
| C950844-00-P | Denise Pothoff       |                 | 9/7/95   | William Young's Resume, Job Description and Labor Classifications                               |
| C950845-00-O | Tyler Jackson        | 950906-0        | 9/6/95   | Review Comments on Scenarios and Procedures Relevant to CDS and Building Considerations for CDS |

| Document No  | Full Name              | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|------------------------|-----------------|----------|---|
| C950846-00-0 | Tim Melott             | 950828-0        | 8/28/95  | Minutes for Meeting on Mechanical Equipment and OSB Ceiling Heights   |
| C950847-00-U | Tim Melott             | 950830-0        | 8/30/95  | Minutes of Meeting re LVEA Cranes   |
| C950848-00-O | Tyler Jackson          | 950905-0        | 9/6/95   | Weekly Coordination Meeting Minutes   |
| C950849-00-O |                        |                 | 9/11/95  | save this number for document from Parsons - meeting minutes  |
| C950850-00-O | William Ashbaugh       |                 | 9/8/95   | Information and Writings by Corrosion Engineering Consultant  |
| C950851-00-B | Larry Jones            |                 | 9/8/95   | Size Requirements for Beam Tube Fabrication Buildings   |
| C950852-00-V | Richard Bagley         |                 | 9/11/95  | Comments on Vacuum Equipment Contract (LIGO-C950804-00-V)   |
| C950853-00-E | Jeff Hermann           |                 | 9/11/95  | Comments for Update to Requirements Definition Worksheet  |
| C950853-01-E | Jeff Hermann           |                 | 9/19/95  | Updated Requirements Definition Worksheet   |
| C950854-00-O | John Stewart           |                 | 9/11/95  | Standard Load Information Request   |
| C950855-00-B | Larry Jones            |                 | 9/12/95  | Tasks Remaining for QT Module   |
| C950856-00-O | James A. Beard         |                 | 9/12/95  | Bid Clarification Questions   |
| C950857-00-O | Tyler Jackson          |                 | 9/11/95  | Bid Clarification Questions from Various Contractors  |
| C950858-00-B | Paul A. LoBello        |                 | 8/31/95  | Contract C146, Option - Proposal Revisions, RFP KD 215  |
| C950859-00-O | Tim Melott             | 950912-0        | 9/12/95  | Ambient PSD Analysis for Technical Foundation at Hanford Site - LVEA, Mid-Station, and End-Station                |
| C950860-00-O | Eliot Labbe            |                 | 9/8/95   | Pre-Bid Questions   |
| C950861-00-O | Eliot Labbe            |                 | 9/11/95  | Pre-Bid Questions   |
| C950862-00-O | Rodney Pennock         |                 | 9/11/95  | Pre-Bid Questions   |
| C950863-00-O | J. E. Irby             |                 | 9/11/95  | Pre-Bid Questions   |
| C950864-00-O | H. E. Folk             |                 | 9/11/95  | Application for Bidding Package for Rough Grading, Livingston   |
| C950865-00-P | Ray Yuen               |                 | 9/6/95   | MIT Fax Request for Authorization to Purchase Equipment   |
| C950866-00-V | Richard Bagley         |                 | 9/6/95   | PDR Update Meeting Agenda   |
| C950867-00-O | Charlie Hickman        |                 | 9/6/95   | Application to Bid on Rough Grading, Livingston   |
| C950868-00-O | William Parker         | 95-010          | 9/6/95   | Proposal for Grounding and Shielding Support Contract   |
| C950869-00-O | Tim Melott             |                 | 9/6/95   | Statement of Work for the Geotechnical Field Monitoring and Testing of the Rough Grading Construction, Livingston |
| C950870-00-O | Tim Melott             |                 | 9/6/95   | Statement of Work for the Additional Geotechnical Testing for the Design of the LIGO Site, Livingston             |
| C950871-00-O | Tim Melott             |                 | 9/6/95   | Statement of Work for the Field Settlement Survey of the Rough Grading Construction of the LIGO Site, Livingston  |
| C950872-00-O | Tim Melott             |                 | 9/6/95   | SOWs for Survey and Geotechnical at Livingston  |
| C950873-00-O | Tim Melott             |                 | 9/12/95  | Section of Uniform Building Code that Address Criteria for Exiting of Beam Tube Enclosure                         |
| C950874-00-O | Tyler Jackson          | 950905-0        | 9/5/95   | List of Required Permits, Reviews, Authorizations and Notifications for Rough Grading and Facility Construction   |
| C950875-00-E | James Anderson         |                 | 9/5/95   | Quotation for Installation of Fiber Optic Cables  |
| C950876-00-O | Frank D. Dallas        |                 | 8/30/95  | LIGO Beam Tube Construction Contract - Bake-Out Power   |
| C950877-00-P | Ray Yuen               |                 | 8/31/95  | MIT Fax Request for Authorization to Purchase Equipment   |
| C950878-00-V | David Mc Williams      |                 | 8/31/95  | Ultimate Pressure Requirements  |
| C950879-00-O | Frank D. Dallas        |                 | 8/30/95  | Adjustments to Submitted Proposal   |
| C950880-00-O | Jeff Hermann           | M-0025 (RFI #)  | 8/31/95  | Request for Information (RFI) Sample Form   |
| C950881-00-O | Staret (Joe) Courville |                 | 9/12/95  | Pre-Bid Questions   |
| C950882-00-B | Marty Tellalian        |                 | 9/11/95  | Additional Testing Cost Estimate  |
| C950883-00-D | Karl Reithmaier        |                 | 9/6/95   | Layout for the Tilt Stage   |
| C950884-00-B | Marty Tellalian        |                 | 9/8/95   | Tube Termination Support Concepts   |
| C950885-00-D | Jean Siomkos           | CD-JMS-2587     | 9/11/95  | Program Status Report, Period ending 6 September 1995   |
| C950886-00-O | Ara Arman              |                 | 9/13/95  | Comments on Statement of Work for Field Monitoring  |
| C950887-00-O | Ara Arman              |                 | 9/13/95  | Louisiana Standard Specifications for Roads and Bridges with Comments   |
| C950888-00-D | Earl Friese            |                 | 8/4/95   | Notification of Intent to Subcontract to CSIRO for a Polishing Technology Demonstration                           |
| C950889-00-D | Karen Sandberg         |                 | 8/4/95   | Approval of Subcontract with High Technology Engineering Services (HTES)  |
| C950890-00-P | Karen Sandberg         |                 | 8/4/95   | Approval of Change Order 1 for Subcontract with Applied Integration Management (AIM) for Support of PMCS          |
| C950891-00-M | Karen Sandberg         |                 | 8/11/95  | Approval for Change Order 3 of Contract with Fischer Project Controls in Support of PMCS                          |
| C950892-00-V | Ed Jasnow              |                 | 9/13/95  | Proposed Contract for Vacuum Equipment (LIGO-C950804-00-V)  |
| C950893-00-B | Paul A. LoBello        |                 | 9/13/95  | Contract C-146, Option - Proposal Revisions   |
| C950894-00-V | David Mc Williams      |                 | 9/13/95  | PDR Update Agenda   |
| C950895-00-D | Jean Siomkos           | CD-JMS-2588     | 9/12/95  | LIGO Program Status Report through 12 September 1995  |
| C950896-00-O | D. J. La Plante        |                 | 8/28/95  | 1995 Settlement HSSA Wage Data  |
| C950897-00-V | Ed Jasnow              |                 | 9/13/95  | Proposed Contract for Vacuum Equipment (LIGO-C950804-00-V)  |
| C950898-00-O | Otto Matherny          |                 | 9/13/95  | Transmittal of full-size drawings to bidding contractors for Rough Grading - Livingston                           |
| C950898-00-V | John Worden            |                 | 11/16/95 | Vacuum Loads on the LVEA Slab   |
| C950899-00-O |                        |                 | 8/30/95  | Livingston Rough Grading Bid Package, Project Manual Contract Set - P.O. JL 221, October 1995                     |
| C950899-01-O | Tyler Jackson          | 950914-0        | 9/14/95  | Addendum No. 1 for Rough Grading Bid Package  |

| Document No  | Full Name            | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|----------------------|------------------|---------|---|
| C950900-00-P | Mike T. Gamble       |                  | 1/19/95 | High Technology Engineering Services Fiscal Information, Revision 2   |
| C950901-00-P | Mike T. Gamble       |                  | 1/11/95 | High Technology Engineering Services Purchase Requisition Negotiation   |
| C950902-00-P | Mike T. Gamble       |                  | 1/9/95  | High Technology Engineering Services Fiscal Information, Revision 1   |
| C950903-00-U | Rich Abbott          |                  | 9/13/95 |   |
| C950904-00-P | Karen Dowd           |                  | 1/18/95 | P.O. PC150969 with Parsons and Concurrence Signatures   |
| C950905-00-P | Irena Petrac         |                  | 9/14/95 | Request for Rent-Free Use of Government Equipment   |
| C950906-00-O | Tyler Jackson        | 950911-0         | 9/11/95 | Weekly Coordination Meeting of 11 September 1995  |
| C950907-00-O | Richard Price        |                  | 9/14/95 | Pre-Bid Questions   |
| C950908-00-P | Karen Sandberg       |                  | 9/14/95 | Approval from NSF for the MIT Work and Cost Plan  |
| C950909-00-B | Marty Tellalian      | 14160 (inv. #)   | 8/16/95 | Technology Development Partial Payment Invoice  |
| C950910-00-M | Sandy Pool           | 1403737 (inv. #) | 9/11/95 | Billing for Legal Services from Perkins Coie  |
| C950911-00-O | Tyler Jackson        | 950913-0         | 9/13/95 | Construction Management Plan  |
| C950912-00-O | Tyler Jackson        |                  | 9/15/95 | Transmittal of Addendum No. 1 to Invitation to Bid (IFB) JL 221 - Rough Grading in LA                                     |
| C950912-00-O | Ed Jasnow            |                  | 9/15/95 | Transmittal of Addendum No. 1 to Invitation to Bid (IFB) JL 221 - Rough Grading in LA                                     |
| C950913-00-D | A. Leistner          |                  | 9/15/95 | Drawings of Mirror Holder Mark 2 Mechanical Assembly for Review   |
| C950914-00-O | Arthur Theis         |                  | 9/15/95 | Rough Grading Plan Review for Compliance with Hydrologic and Hydraulic Study  |
| C950915-00-D | Garilynn Billingsley |                  | 9/15/95 | Action Items #4, 6, 8 and 9 Responses   |
| C950916-00-O | Tyler Jackson        | 950912-0         | 9/13/95 | Minutes of Meeting re Rough Grading Bid Addendum held 12 September 1995   |
| C950917-00-O | Fred Asiri           |                  | 9/14/95 | Caltech/Parsons Weekly Meeting Minutes for 11 September 1995  |
| C950918-00-O | Otto Matherny        |                  | 9/18/95 | Notification of Selection to Provide Electric Service at LA Site  |
| C950919-00-V | Richard Bagley       |                  | 9/18/95 | Kick-Off Meeting Agenda for 20 September 1995, DRAFT  |
| C950920-00-P | William O. Miller    |                  | 9/15/95 | SIS Program Plan, Phase 1 - DRAFT   |
| C950921-00-B | Marty Tellalian      |                  | 9/18/95 | Change Order Request for Additional LIGO Beam Tube Qualification Testing  |
| C950922-00-B | Marty Tellalian      |                  | 9/18/95 | Additional LIGO Beam Tube Qualification Testing and Support Bracket Calculations  |
| C950923-00-P | Jean Siomkos         |                  | 9/18/95 | Non-Disclosure Agreement for HDOS   |
| C950924-00-M | Joe Hoffman          |                  | 9/18/95 | Due Diligence Review Information  |
| C950925-00-E | Jeff Hermann         |                  | 9/18/95 | Question re Structural Analysis Adjustment (D950029-Rev 3)  |
| C950926-00-B | Paul A. LoBello      |                  | 9/18/95 | C-146, Option - Proposal Revisions  |
| C950927-00-D | Garilynn Billingsley |                  | 9/19/95 | Drawing Exception   |
| C950928-00-D | Garilynn Billingsley |                  | 9/19/95 | CSIRO Metrology Mount Sketch  |
| C950929-00-B | Paul A. LoBello      |                  | 9/19/95 | RFP KD 215 Proposal Revisions re Electrical Equipment and Associated Costs  |
| C950930-00-D | Lorraine Simonof     | 50935            | 9/19/95 | Quotation for Guide Rods  |
| C950931-00-P | Irena Petrac         |                  | 9/19/95 |   |
| C950932-00-O | Mark Bonner          |                  | 9/19/95 | Analyses for Electrical Power to LA LIGO Facility   |
| C950933-00-O | Tyler Jackson        | 950918-0         | 9/18/95 | Trip Report - John Blasius to Livingston on 9/7-8/95  |
| C950934-00-B | Larry Jones          |                  | 9/20/95 | Task Order 95-04 - Performance of Additional Tasks for QT Module  |
| C950935-00-O | Tyler Jackson        | 950918-0         | 9/18/95 | Weekly Coordination Meeting Minutes for 18 September 1995   |
| C950936-00-O | Rick Savage          |                  | 9/20/95 | Review of Ambient PSD for Hanford, Vibrational and Acoustic Requirements for LIGO, and the Geotechnical Survey of Hanford |
| C950937-00-O | Jeff Hermann         |                  | 9/19/95 | Location of LVEA Floor Drains and Sinks   |
| C950938-00-O | Dennis Coyne         |                  | 9/20/95 | Proposed Guidance/Direction to Parsons Re Support Requirements for the PSL  |
| C950939-00-O | Tyler Jackson        | 950918-1         | 9/18/95 | Model Bid Package   |
| C950940-00-O | John James Blasius   |                  | 9/20/95 | Responses to Bid Questions  |
| C950941-00-O | Ed Jasnow            |                  | 9/20/95 | Addendum #2 to IFB JL 221 - Rough Grading Bid Package, Livingston   |
| C950942-00-V | Dick Curtis          |                  | 9/20/95 | Proposed Routing of LN2 Piping and Pipe Bridge Locations  |
| C950943-00-O | Jeff Hermann         | PM-950919-1      | 9/20/95 | Location of LVEA Floor Drains, Sinks, and Hose Bibs   |
| C950943-01-O | Jeff Hermann         | PM-950919-1      | 9/22/95 | Location of LVEA Floor Drains, Sinks, and Hose Bibs, Revision 1   |
| C950944-00-O | Jeff Hermann         | PM-9500920-1     | 9/20/95 | Design Direction for Shop Air System  |
| C950945-00-O | Jeff Hermann         | PM-950920-2      | 9/20/95 | Design Direction for Clean Work Benches   |
| C950946-00-O | Jeff Hermann         | PM-950920-3      | 9/20/95 | Design Direction for Telephone Systems  |
| C950947-00-O | Jeff Hermann         | PM-950920-4      | 9/20/95 | Design Direction for FMCS   |
| C950948-00-O | Jeff Hermann         |                  | 9/20/95 | Copies of Design Direction Memorandums for Information  |
| C950949-00-O | Dennis Coyne         |                  | 9/20/95 | Comments on IOC re Floor Drains and Sinks in the LVEA (LIGO-C950937-00-O)   |
| C950950-00-D | Irena Petrac         |                  | 9/21/95 | Change Order #2 for P.O. PC162519 - Optics Coating Demonstration with REO   |
| C950951-00-U | Ed Jasnow            |                  | 9/21/95 | Change Order #4 for P.O. PP108027 for   |
| C950952-00-B | Marty Tellalian      |                  | 9/21/95 | Additional LIGO Beam Tube Qualification Testing Schedule  |
| C950953-00-B | Don Roberts          |                  | 9/21/95 | Tube Mill, Outside Installations and Quotation Time   |
| C950954-00-P | Irena Petrac         |                  | 9/6/95  | Collaborative Research Program with Tufts University - P.O. PC173021  |

| Document No  | Full Name            | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|----------------------|-----------------|---------|---|
| C950955-00-O | Fred Asiri           |                 | 9/22/95 | Caltech/Parsons Weekly Meeting Minutes for 18 September 1995  |
| C950956-00-P | Ed Jasnow            |                 | 9/25/95 | Ed Jasnow to CBI re contract  |
| C950957-00-V | Mark Coles           |                 | 9/23/95 | Trip Report from PSI Site Visit - 20 September 1995   |
| C950958-00-O | Tim Melott           |                 | 9/22/95 | Crane Configuration Sketches  |
| C950959-00-O | Arthur Theis         |                 | 9/22/95 | Review of Livingston Rough Grading, Plans and Specifications for Compliance with the LIGO Hydrology and Hydraulic Drainage Report         |
| C950960-00-P | Timothy Jones        |                 | 9/22/95 | Rent Free Use of Government Owned Equipment for HDOS  |
| C950961-00-M | Karen Sandberg       |                 | 9/14/95 | NSF Approval of Subcontract for Vacuum Equipment with PSI   |
| C950962-00-M | Karen Sandberg       |                 | 9/14/95 | NSF Approval for FY95 MIT Work and Cost Plans   |
| C950963-00-O | Melissa Soilean      |                 | 9/25/95 | Request for Bidder/Contractor Awarded Rough Grading Contract  |
| C950964-00-O | Jeff Hermann         | PM-950922-0     | 9/22/95 | Design Direction for Laser Power and Cooling Loads  |
| C950965-00-P | Ed Jasnow            |                 | 9/25/95 | Performance of Seismic Measurements for LIGO Site at Livingston   |
| C950966-00-O | Jeff Hermann         |                 | 9/22/95 | DCCD Cost Additions for Sinks, Hose Bibs and Eyewash Showers  |
| C950967-00-O | Carl Marshall        |                 | 9/21/95 | LIGO Project Dehumidification Proposal  |
| C950968-00-O | Tyler Jackson        | 950922-0        | 9/22/95 | DCCD Additional Costs and LVEA Drainage Concerns  |
| C950969-00-P | Ed Jasnow            |                 | 9/1/95  | Resubmittal of Proposed Contract for Vacuum Equipment (LIGO-C950804-00-V)   |
| C950970-00-D | Jean Siomkos         | CD-JMS-2593     | 9/22/95 | Approval/Concurrence Requested for Changes to Fiducial Line Width   |
| C950971-00-O | Jeff Hermann         | 950925-2        | 9/25/95 | Proposed solution for Bridging Gap Between LVEA Slab and Footings   |
| C950972-00-O | Larry Jones          |                 | 9/26/95 | Existing Buildings - Realtors   |
| C950973-00-B | Marty Tellalian      |                 | 9/18/95 | Additional Beam Tube Qualification Testing & Support Bracket Calculations   |
| C950974-00-P | Patricia Greer       | OSP #76481      | 1/12/95 | Supplement to P.O. PP045667 for Additional Funding  |
| C950975-00-O | Daniel Franklin      |                 | 9/25/95 | Company Information for Construction Services   |
| C950976-00-D | Distribution         | 79881           | 9/26/95 | Quotation for High Profile Double Flash Strobe Light from McMaster-Carr   |
| C950977-00-O | Rick Savage          |                 | 9/27/95 | Equipment Location Key for Ambient Vibration Analysis   |
| C950978-00-O | Tim Melott           |                 | 9/21/95 | Equipment Location Key for Ambient Vibration Analysis   |
| C950979-00-O | Carlos Uriarte       | BNW #24827      | 9/26/95 | Proposal to Conduct Field Measurements and Analysis on the LIGO Seismic Noise Spectrum at the Louisiana Site                              |
| C950980-00-P | Irena Petrac         |                 | 9/27/95 |   |
| C950981-00-D | Dr. Chris Walsh      |                 | 9/6/95  | System Requirements Review Meeting Minutes for 5-6 September 1995   |
| C950982-00-O | Tyler Jackson        |                 | 9/20/95 | Engineer's Estimate for IFB JL221 for Livingston Rough Grading  |
| C950983-00-D | Garilynn Billingsley |                 | 9/27/95 | Phone Conversation Follow-up  |
| C950984-00-V | Linda Turner         |                 | 9/28/95 | Distribution of CDRL PSI-VEB001AA1A01   |
| C950985-00-V | Linda Turner         |                 | 9/28/95 | Distribution of CDRL PSI-VEB002AA1A01   |
| C950986-00-P | Robert Powell        |                 | 9/26/95 | Transmittal of Signed Contract #PC175730 with request for Amendment   |
| C950987-00-O | J. Glover            |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950988-00-O | James Affolter       |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950989-00-O | Robert Boh           |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950990-00-O | Michael Killgore     |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950991-00-O | John Hill            |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950992-00-O | Ted Moulard          |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950993-00-O | M. Matt Durand       |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950994-00-O | Richard Price        |                 | 9/26/95 | Bid in Response to IFB JL221 for Rough Grading in Livingston  |
| C950995-00-D | Dr. Chris Walsh      |                 | 9/29/95 | Weekly Status Report  |
| C950996-00-B | Larry Jones          |                 | 9/29/95 | Beam Tube Fabrication and Installation Contract Clarification   |
| C950997-00-B | Ed Jasnow            |                 | 9/29/95 | Comments on General Provisions  |
| C950998-00-B | Ed Jasnow            |                 | 9/29/95 | LIGO Beam Tube Module Fabrication and Installation, Final Caltech Position  |
| C950999-00-O | Doug Barab           |                 | 9/26/95 | Meeting with LIGO on 21 September 1995 re Issues of Electrical Services   |
| C951000-00-P | Jean Siomkos         |                 | 9/29/95 | Non-Disclosure Agreement with HDOS, Revised   |
| C951001-00-O | Arthur Theis         |                 | 9/29/95 | Progress of LIGO Surveys - Profiles, Livingston   |
| C951002-00-O | Jeff Hermann         |                 | 9/29/95 | Beam Tube Enclosure (BTE) Basis of Design - Section 2.2 Describing Code Analysis for Existing Provisions of the Beam Tube Enclosure (BTE) |
| C951003-00-D | Jim Rogers           | CIT2            | 9/28/95 | Quotation for Recommended Computer Software   |
| C951004-00-V | Richard Bagley       |                 | 9/28/95 | LIGO Vacuum Equipment PDR Agenda and Attendees for 2 October 1995   |
| C951005-00-P | National Instruments | Q52008          | 9/27/95 | Quotation for LabVIEW Application Builder   |
| C951006-00-D | Jason Wensel         | 95-146          | 9/27/95 | Quotation from Lightwave Electronics Corp.  |
| C951007-00-D | Steve Bulleit        |                 | 9/29/95 | Gravitational Wave Detector Prototype Compressed Air System   |
| C951008-00-P | Linda Turner         |                 | 10/2/95 | Distribution of CDRL PAR-FDCM002AA1M9508  |
| C951009-00-V | Joan Collins         | 995017/995016   | 10/3/95 | PSI Invoices for Milestones #1, #2, and #4 (Phase B)  |
| C951010-00-O | Tyler Jackson        |                 | 10/3/95 | Dun & Bradstreet Business Information Report on Stranco, Inc.   |
| C951011-00-D | Garilynn Billingsley |                 | 10/3/95 | TDM 95-03, Exception to Drawing D950020   |

| Document No  | Full Name            | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|----------------------|-----------------|----------|--|
| C951011-00-V | John Worden          |                 | 12/19/95 | Agreements and Commitments with PSI  |
| C951012-00-V | Mike Zucker          |                 | 9/29/95  | Clarification of ICD Schedule and Selected Interferometer/VE Interface Issues  |
| C951013-00-D | Doug Jungwirth       |                 | 10/5/95  | TDM 95-01 for Layout of IFO Beams  |
| C951014-00-V | Karen Sandberg       |                 | 9/20/95  | Revised Approval of Vacuum Equipment Subcontract with PSI  |
| C951015-00-D | Andreas Nonnenmacher |                 | 10/5/95  | Cost/Manhour Summary and Metrology Flow Chart  |
| C951016-00-P | Sandy Pool           |                 | 10/5/95  | Invoice for Legal Services by Kean, Miller, Hawthorne (KMH) dated 31 August 1995   |
| C951017-00-P | Sandy Pool           |                 | 9/29/95  | Invoice for Legal Services for Perkins Coie dated 22 September 1995  |
| C951018-00-V | Ed Jasnow            |                 | 10/5/95  | Clarification of Capabilities for Beam Tube Module (KD 215, LIGO-C950476-00-P)   |
| C951019-00-B | Don Roberts          |                 | 9/21/95  | Tubes on Barge Question  |
| C951020-00-O | Tim Melott           |                 | 10/4/95  | Statement of Work (SOW) for the Additional Geotechnical Testing for the Design of the LIGO Site - Livingston                               |
| C951021-00-D | Steve Bulleit        |                 | 10/2/95  | Information on Scroll Compressors  |
| C951022-00-O | Doug Barab           |                 | 10/3/95  | Equipment Drawing and Dimensions   |
| C951023-00-B | Paul A. LoBello      |                 | 10/2/95  | Clarifications to Final Offer for Beam Tube Module Contract  |
| C951024-00-D | Andreas Nonnenmacher |                 | 10/5/95  | Weekly Status Report through 3 October 1995  |
| C951025-00-B | Marty Tellalian      |                 | 10/5/95  | Return of Signed Task Order #95-04   |
| C951026-00-D | Dr. Chris Walsh      |                 | 10/3/95  | Gantt Chart for the CSIRO Optus Polishing Demonstration  |
| C951027-00-D | Irena Petrac         |                 | 9/11/95  | REO  |
| C951028-00-D | Ramin Lalezari       |                 | 9/7/95   | Status of the Coating Development  |
| C951029-00-D | Bill Kells           |                 | 9/6/95   | Quartz Blanks  |
| C951030-00-D | Ramin Lalezari       |                 | 9/6/95   | Fused Quartz Substrate and Specifications  |
| C951031-00-D | Ramin Lalezari       |                 | 9/5/95   | Coating  |
| C951032-00-O | Tyler Jackson        |                 | 10/5/95  | Shell Pipeline Sketches and Rough Grading Drawing  |
| C951033-00-D | Dale Ness            |                 | 8/30/95  | Coating Data   |
| C951034-00-P | Richard Bagley       | V049-PL-001     | 10/5/95  | PSI Travel Outside of Contract Scope   |
| C951035-00-D | Bill Kells           |                 | 8/28/95  | Status Report on Coating Data  |
| C951036-00-D | David Shoemaker      |                 | 8/25/95  | Polishing Specifications for the Pathfinder Optic  |
| C951036-00-D | Bill Kells           |                 | 8/25/95  | Polishing Specifications for the Pathfinder Optic  |
| C951037-00-D | Ramin Lalezari       |                 | 8/24/95  | T Scan   |
| C951038-00-P | Ed Jasnow            |                 | 10/5/95  | Proposed Contract for Rough Grading in Livingston (JL 221, LIGO-C950889-00-O)  |
| C951039-00-O | Ara Arman            |                 | 10/5/95  | Shell Pipeline Crossing  |
| C951040-00-V | Richard Bagley       | V049-PL-002     | 10/6/95  | PSI Needs List dated 4 October 1995, and Meeting Minutes for 20 September 1995   |
| C951040-01-V | Tom Starr            | V049-NL-07      | 12/11/95 | Project Needs List, dated 11 December 1995   |
| C951040-03-V | Tom Starr            | V049-PL-8       | 11/1/95  | Project Needs List #3 (V049-PL-8), dated 1 November 1995   |
| C951040-06-V | Tom Starr            | V049-NL-06      | 12/1/95  | Project Needs List   |
| C951040-07-V | Tom Starr            | V049-NL-07      | 12/11/95 | Project Needs List, dated 11 December 1995   |
| C951040-08-V | Richard Bagley       | V049-NL-08      | 1/4/96   | Project Needs List, dated 4 January 1996   |
| C951040-09-V | Tom Starr            | V049-NL-09      | 1/29/96  | Project Needs List #9, dated 29 January 1996   |
| C951040-10-V | Richard Bagley       | V049-NL-10      | 2/9/96   | Project Needs List #10, dated 9 February 1996  |
| C951040-11-V | Tom Starr            | V049-NL-11      | 3/11/96  | Project Needs List #11, dated 11 March 1996  |
| C951040-12-V | Tom Starr            |                 | 4/11/96  | Project Needs List.  |
| C951040-13-V | Tom Starr            | V049-NL-13      | 5/10/96  | Project Needs List   |
| C951040-14-V | Tom Starr            | V049-NL-14      | 5/29/96  | Project Needs List - 5/29/96   |
| C951040-15-V | Tom Starr            | V049-NL-15      | 7/11/96  | Project Needs List   |
| C951041-00-V | Richard Bagley       | V049-PL-002     | 10/6/95  | LIGO/PSI Meeting Minutes for 20 September 1995   |
| C951042-00-B | Larry Jones          |                 | 10/6/95  | RGA Quote to CBI   |
| C951043-00-O | Tyler Jackson        | 951004-0        | 10/4/95  | Beam Tube Enclosure Exit Requirements  |
| C951044-00-B | Dennis Buckley       | 310080          | 10/6/95  | Quotation  |
| C951045-00-B |                      |                 | 10/6/95  | Quotation for QMG421   |
| C951046-00-B | Ed Jasnow            |                 | 10/6/95  | Confirmation of Call re Pre-Bake Leak Check for Contract for Beam Tube Modules Fabrication and Installation (KD215, LIGO-C950476-00-P)     |
| C951047-00-D | Dr. Chris Walsh      |                 | 10/9/95  | Weekly Report, dated 9 October 1995  |
| C951048-00-P | Ed Jasnow            |                 | 10/1/95  | General Provisions - Architect-Engineer Contract   |
| C951049-00-B | Paul A. LoBello      |                 | 10/10/95 | Proposed Revisions to General Provisions (LIGO-C950323-00-P)   |
| C951050-00-O | Ed Jasnow            |                 | 10/16/95 | P.O. PC175058 for the Ambient Ground Vibration Measurement at Livingston   |
| C951051-00-E | Jeff Hermann         | 951012-0        | 10/10/95 | Technical Interchange Meeting Notice for 12 October 1995   |
| C951052-00-M | Anthony Favaloro     | OSP 76481       | 10/3/95  | Submittal of Renewal Proposal for P.O. PP045667  |
| C951053-00-O | Ed Jasnow            |                 | 10/10/95 | Statement of Work (SOW) for the Geotechnical Field Monitoring and Testing of the Rough Grading Construction of the LIGO Site at Livingston |
| C951054-00-O | Ed Jasnow            |                 | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951053-00-O)   |



| Document No  | Full Name                  | ContractorDocNo   | Doc Dt   | Full Title   |
|--------------|----------------------------|-------------------|----------|--|
| C951055-00-O | Ed Jasnow                  |                   | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951053-00-O)   |
| C951056-00-O | Ed Jasnow                  |                   | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951053-00-O)   |
| C951057-00-O | Ed Jasnow                  |                   | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951053-00-O)   |
| C951058-00-O | Ed Jasnow                  |                   | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951053-00-O)   |
| C951059-00-O | Ed Jasnow                  |                   | 10/11/95 | Invitation to Submit Proposal for RFP EJ-223 (LIGO-C951059-00-O)   |
| C951062-00-O | Vernon F. Associates, Inc. |                   | 10/6/95  | Transmittal of LIGO Project GPS Printout   |
| C951063-00-D | Andreas Nonnenmacher       |                   | 10/13/95 | Weekly Report, dated 13 October 1995   |
| C951064-00-P | Irena Petrac               |                   | 10/13/95 | Transmittal of LIGO Project/REO Subcontract, Change Order #2   |
| C951065-00-O | Jeff Hermann               | 951013-2          | 10/13/95 | Chilled Water Loop at the Corner Station   |
| C951065-01-O | Jeff Hermann               | 951013-2, Rev. 1  | 10/16/95 | Chilled Water Loop at the Corner Station, Revision 1   |
| C951066-00-O | Ed Jasnow                  |                   | 10/13/95 | Transmittal of Contract PC175058 (LIGO-C951050-00-O) for Signature   |
| C951067-00-D | Dr. Chris Walsh            |                   | 10/16/95 | Weekly Report, dated 16 October 1995   |
| C951069-00-O | Richard Speer              |                   | 10/16/95 | Sketch and Calculations for Slab to be Built Over the Shell Pipelines, Revision 2  |
| C951069-03-O | Woodward-Clyde             | 95B064, Rev. 3    | 11/3/95  | LIGO Pipe Crossing Slab  |
| C951069-04-O | Woodward-Clyde             | 95B064, Rev. 4    | 12/13/95 | LIGO Pipe Crossing Slab  |
| C951070-00-O | Jeff Hermann               |                   | 10/13/95 | Study Results for Proposed Relocation of Chiller Plants at the Mid and End Stations  |
| C951071-00-O | Tim Melott                 | 951004-0          | 10/6/95  | Minutes of Meeting re. Hanford Pre-PDR On-Board Review, 4 October 1995   |
| C951073-00-D | Yvonne Roeder              |                   | 9/19/95  | Invoice  |
| C951074-00-V | Richard Bagley             |                   | 9/20/95  | LIGO Vacuum Equipment Contract Kickoff Meeting Minutes for 20 September 1995   |
| C951075-00-P | Joan Boughan               |                   | 10/13/95 | MIT Request for Foreign Travel Approval  |
| C951076-00-O | Richard Speer              |                   | 10/16/95 | Final Inspection - Site Preparation for Aerial Survey, Livingston  |
| C951077-00-O | Fred Asiri                 |                   | 10/17/95 | Transmittal of Drawings  |
| C951078-00-V | John Worden                |                   | 10/18/95 | TIM #1 - Response to "Needs List" dated 10/04/95 (LIGO-C951079-00-V)   |
| C951079-00-V | Richard Bagley             |                   | 10/4/95  | Project Needs List, dated 4 October 1995   |
| C951079-01-V | Richard Bagley             | V049-NL-          | 10/18/95 | Project Needs List, dated 18 October 1995  |
| C951079-02-V | Richard Bagley             | V049-NL           | 11/10/95 | Project Needs List #4, dated 10 November 1995  |
| C951080-00-B | Ed Jasnow                  |                   | 12/8/95  | LIGO Beam Tube Modules - Fabrication and Installation, Contract # PC181520 between CIT and CBI   |
| C951080-00-B | Larry Jones                |                   | 12/8/95  | LIGO Beam Tube Modules - Fabrication and Installation, Contract # PC181520 between CIT and CBI   |
| C951080-02-B | Ed Jasnow                  |                   | 1/23/96  | Change Order #2 for P.O. PC 181520   |
| C951080-04-B | Larry Jones                | PC181520          | 5/17/96  | Change Order #4 for PO PC181520  |
| C951081-00-O | Rick Savage                |                   | 10/17/95 | Request for Review of Hanford Beam Tube Enclosure - Basis of Design Report for Lightning Protection  |
| C951082-00-B | Warren A. Carpenter        |                   | 10/17/95 | Balzers Software, LIGO Pumping Systems   |
| C951083-00-V | Richard Bagley             | V049-MM-2         | 10/2/95  | Meeting Minutes for 2 October 1995   |
| C951084-00-O | Kai Ramsing                | 951013-1          | 10/16/95 | Minutes of Meeting for Electrical Service to Buildings and Beam Tube Enclosures at Hanford on 13 October 1995  |
| C951085-00-D | Karl Reithmaier            |                   | 10/16/95 | Set of Drawings, Draft   |
| C951086-00-O | Jeff Hermann               | PM-951017-0       | 10/17/95 | Record of Telephon Conversation with Fred Asiri re. Study for New Beam Tube Support Configuration  |
| C951087-00-O | Jeff Hermann               | 951016-0          | 10/17/95 | Minutes of Meeting re. Power Distribution for Hanford, 16 October 1995   |
| C951088-00-O | Jeff Hermann               |                   | 12/13/95 | Request for Credit for Return of Plans and Specifications  |
| C951089-00-O | Jeff Hermann               | 951013-1          | 10/13/95 | Study Results for Proposed Relocation of the Chiller Plants at the Mid and End Stations - Hanford and Livingston   |
| C951089-01-O | Jeff Hermann               | 951013-1, Rev. 1  | 10/19/95 | Study Results for Proposed Relocation of the Chiller Plants at the Mid and End Stations at both Hanford and Livingston Sites                             |
| C951090-00-O | Richard Speer              |                   | 10/18/95 | Request for Clarification of RFP for Geotechnical Field Monitoring and Testing, Rough Grade Construction - Livingston                                    |
| C951091-00-O | Jeff Hermann               |                   | 10/18/95 | Beam Tube Enclosure Foundation Design - Reinforcing Calculations for the 5 and 6 Inch Arch Thickness   |
| C951092-00-M | Dr. David Berley           |                   | 10/18/95 | Livingston Rough Grading - Recommendation for Inclusion of a Second Road   |
| C951092-00-O | Dr. David Berley           |                   | 10/18/95 | Livingston Rough Grading Contract - Two Roads vs. One Road   |
| C951093-00-O | Jeff Hermann               |                   | 10/18/95 | Requirements Definition Worksheet, dated 18 October 1995   |
| C951094-00-B | Larry Jones                |                   | 10/11/95 | P.O. PP181521, Baffle Bake   |
| C951095-00-O | Paul Weickert              |                   | 10/18/95 | Review of Final Design - Draft Documents Prepared by Parsons   |
| C951096-00-O | Marshall Long              |                   | 10/16/95 | Calculations   |
| C951097-00-O | Ed Jasnow                  |                   | 10/19/95 | Addendum 1 to RFP EJ-223 (LIGO0C951053-00-O), Geotechnical Field Monitoring and Testing of the Rough Grading Construction of the LIGO Site at Livingston |
| C951103-00-O | Paul MacCalden             |                   | 10/19/95 | Acoustic PSD Conversion  |
| C951104-00-O | Jeff Hermann               | 951016-0          | 10/17/95 | Minutes of Meeting re. Power Distribution for Hanford, 16 October 1995   |
| C951105-00-O | Jeff Hermann               | 951005-0/951016-0 | 10/16/95 | Technical Interchange Meeting Minutes from 5 October 1995  |
| C951106-00-O | Warren A. Carpenter        |                   | 10/12/95 | Data Acquisition System Printout for Bakeout Progress  |
| C951107-00-B | Larry Jones                |                   | 10/9/95  | Rai's 21 Gasses with Trial Partition Fractions   |
| C951108-00-O | Tyler Jackson              |                   | 10/9/95  | Beam Tube Enclosure FDR Estimate Summary - Hanford   |
| C951109-00-O | Hal Amick, PE              |                   | 10/9/95  | Review of Parsons' Report - "Ambient PSD Analyses" (LIGO-C950859-00-O)   |
| C951110-00-O | Jeff Hermann               | 951005-0          | 10/9/95  | Technical Interchange Meeting Minutes, DRAFT, for 5 October 1995   |

| Document No  | Full Name            | ContractorDocNo    | Doc Dt   | Full Title  |
|--------------|----------------------|--------------------|----------|---|
| C951111-00-O | Jeff Hermann         |                    | 10/9/95  | Technical Interchange Meeting Notice, DRAFT   |
| C951112-00-O | Tyler Jackson        | PM-951005-0        | 10/5/95  | Record of Telephone Conversation with Fred Asiri/John Blasius re Livingston Pipeline Cover Design                             |
| C951113-00-O | Tim Melott           |                    | 9/1/95   | Statement of Work for the Additional Geotechnical Testing for the Design of the Livingston Site                               |
| C951114-00-O | Richard Speer        |                    | 10/12/95 | Sketch for the Slab to Be Built Over the Shell Pipelines  |
| C951115-00-V | Dick Curtis          |                    | 10/12/95 | New Locations of Nozzles E, F & G   |
| C951116-00-O | Tim Melott           | 950927-0           | 9/27/95  | Minutes of Meeting re Beam Tube Enclosure Exits, 27 September 1995  |
| C951117-00-O | Jeff Hermann         | 950925-0           | 9/29/95  | Minutes of Weekly Coordination Meeting with Caltech, 25 September 1995  |
| C951118-00-O | Tyler Jackson        | PM-950928-0        | 9/28/95  | Record of Telephone Conversation re. NSF Semiannual Review  |
| C951119-00-D | Karun Sreerama       |                    | 10/19/95 | Quotation on SPL Zero Length Adapter  |
| C951120-00-O | Mel Weingart         |                    | 10/19/95 | Advance Draft Copy of Status Report for comments  |
| C951121-00-D | Dr. Chris Walsh      |                    | 10/23/95 | Weekly Report, dated 23 October 1995  |
| C951122-00-O | Paul Weickert        |                    | 10/20/95 | Review of Construction Documents  |
| C951123-00-O | Fred Asiri           |                    | 10/23/95 | TDM 95-14 - Conditional Approval of Draft Final Design Package submitted on 6 and 12 October 1995                             |
| C951124-00-O | William Parker       | 95-015             | 10/20/95 | Proposal for LIGO EMC/EMI Control   |
| C951125-00-O | Karl Drobny          |                    | 10/13/95 | Minutes of Meeting re. Planning Initial Mobilization at Livingston, LA  |
| C951126-00-O | Ed Jasnow            |                    | 10/23/95 | Revised Contract # PC175058 (LIGO-C951050-00-O)   |
| C951127-00-O | Jeff Hermann         | 951018-0           | 10/18/95 | Proposal for Current Transducers, and Proposal for Power Monitors   |
| C951128-00-V | John Worden          |                    | 10/24/95 | Transmittal of Formal Request for Cost Information (LIGO-C950732-00-V)  |
| C951129-00-V | John Worden          |                    | 10/25/95 | Preliminary Collection of PDR Comments  |
| C951130-00-V | John Worden          |                    | 10/31/95 | TIM 95-03, Response to PSI Needs List (LIGO-C951079-01-V)   |
| C951132-00-V | John Worden          |                    | 10/30/95 | Draft Facilities Options Schedule, Revision 6, dated 19 October 1995  |
| C951133-00-V | John Worden          |                    | 10/31/95 | Transmittal of Needs List Answers   |
| C951134-00-V | John Worden          |                    | 11/10/95 | TDM 95-03, Conditional Approval of CDRL 01, PDR   |
| C951135-00-V | John Worden          |                    | 11/10/95 | Transmittal of PDR CDRL 01 Approval   |
| C951136-00-V | John Worden          |                    | 11/22/95 | Technical Information Memorandum (TIM) 04 - Response to PSI "Needs List" dated 10 November 1995                               |
| C951137-00-V | John Worden          |                    | 12/6/95  | TDM 95-04 for Approval of CDRL 02 - the Project Management Plan   |
| C951138-00-V | Richard Bagley       |                    | 10/24/95 | Preliminary Design Review Update Meeting Minutes for 3 October 1995 (V049-MM-3)   |
| C951139-00-O | Ed Jasnow            |                    | 10/24/95 | Approval Request for Louisiana Site Rough Grading (JL-221, LIGO-C950899-00-O) with Incorporation of Change Order #1           |
| C951140-00-V | Raymond Ciatto       | V049-PL-9          | 10/23/95 | Record of Telephone Conversation re. Beam Splitter Chamber - Removable Floor  |
| C951141-00-O | Rick Savage          |                    | 10/25/95 | LIGO Facilities Performance Prediction Review Meeting Agenda  |
| C951142-00-O | Kris Showalter       |                    | 10/23/95 | Request for Bid Package   |
| C951144-00-O | Richard Speer        | 95B320-P           | 10/16/95 | Submittal of Proposal for RFP EJ-223 (LIGO-C951056-00-O) - Geotechnical Field Monitoring and Testing, Livingston              |
| C951145-00-O | Ara Arman            | 95B320-P           | 10/24/95 | Proposal Submitted in Response to RFP EJ-223 (LIGO-C951056-00-O), Geotechnical Field Monitoring and Testing in Livingston, LA |
| C951145-00-O | Richard Speer        | 95B320-P           | 10/24/95 | Proposal Submitted in Response to RFP EJ-223 (LIGO-C951056-00-O), Geotechnical Field Monitoring and Testing in Livingston, LA |
| C951146-00-D | Garilynn Billingsley |                    | 10/25/95 | FEA Model of Optic Deformation Due to Mount   |
| C951147-00-D | William O. Miller    |                    | 10/25/95 | Preliminary Plan for Continuing the Development of the Seismic Isolation Stack (SIS) Concept for LIGO, DRAFT                  |
| C951148-00-O | Fred Asiri           |                    | 10/25/95 | TDM 95-15 - Authorization to Relocate the Chiller Plants to the Proposed Locations  |
| C951150-00-V | David Mc Williams    | V049-PL-7          | 10/26/95 | Proposed November Meeting Agenda and Alternate Vacuum Piping Schematics   |
| C951151-00-O | Jeff Hermann         | PM-951025-0        | 10/27/95 | Design Direction for Relocation of Mid and End Station Chiller Plants   |
| C951152-00-D | Andreas Nonnenmacher |                    | 10/26/95 | Weekly Cost Summary   |
| C951153-00-O | Ara Arman            | 95B050             | 10/26/95 | Soil Stress Distribution Analysis - Pipeline Crossing, Livingston   |
| C951153-00-O | Richard Speer        | 95B050             | 10/26/95 | Soil Stress Distribution Analysis - Pipeline Crossing, Livingston   |
| C951154-00-O | Jeff Hermann         |                    | 10/26/95 | Caltech-Parsons Technical Interchange Meeting Minutes for 12 October 1995 -DRAFT with Comments                                |
| C951155-00-B | Larry Jones          |                    | 10/25/95 | Draft Contract Corrections  |
| C951156-00-V | Dick Curtis          | V049-PL-6          | 10/25/95 | LN2 Storage Tank Footprint/Weights, PRELIMINARY   |
| C951157-00-D |                      |                    | 10/24/95 | Quotation from Nor-Cal Products for Conflat Zero Length Reducer   |
| C951158-00-P | Aaron R. Asrael      |                    | 10/24/95 | NSF Conditions Prior to Approval of Subcontract with Stranco, Inc. for Rough Grading in Livingston                            |
| C951159-00-V | Richard Bagley       | V049-PL-004        | 10/24/95 | CBI Summary Sheet and transmittal of signed TIM #1 and #2   |
| C951160-00-V | Tom Starr            | V049-MM-04         | 10/25/95 | Minutes of Meeting with Allen Sibley held on 20 October 1995  |
| C951160-00-V | Dick Curtis          | V049-MM-04         | 10/25/95 | Minutes of Meeting with Allen Sibley held on 20 October 1995  |
| C951160-01-V | Dick Curtis          | V049-MM-04, Rev. 1 | 10/30/95 | Minutes of Meeting with Allen Sibley held on 20 October 1995  |
| C951160-01-V | Tom Starr            | V049-MM-04, Rev. 1 | 10/30/95 | Minutes of Meeting with Allen Sibley held on 20 October 1995  |
| C951161-00-O | Doug Barab           |                    | 10/25/95 | Status of Power to the LIGO Site  |
| C951162-00-P | Milena Krasich       |                    | 10/26/95 | JPL Reliability Estimate for LIGO System Engineering and Integration  |
| C951163-00-D | Dr. Chris Walsh      |                    | 10/30/95 | Weekly Report, dated 30 October 1995  |
| C951164-00-O | Jeff Hermann         |                    | 10/30/95 | Precast Concrete Beam Tube Enclosure, Preliminary Estimate  |
| C951165-00-P | Bill Murphy          |                    | 10/30/95 | PSI Contract Edits and Comments   |

| Document No  | Full Name              | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|------------------------|-----------------|----------|--|
| C951166-00-P | Karun Sreerama         |                 | 10/27/95 | Proposal for Geotechnical Testing and Monitoring Services at Livingston  |
| C951167-00-D | Monica Sorcelli        |                 | 10/24/95 | Quotation for Conflat Zero Length Reducer  |
| C951168-00-O | Jeff Hermann           |                 | 10/25/95 | Update Request for the DCCD  |
| C951169-00-B | Lance Buboltz          |                 | 10/26/95 | Draft Contract Review Comments   |
| C951170-00-D | Garilynn Billingsley   |                 | 10/30/95 | FEA Model of Optic Deformation Due to Mount  |
| C951171-00-P |                        |                 | 10/30/95 | MIT FY 96 Proposal CSR and MTDC Base Calculations  |
| C951172-00-P | Irena Petrac           |                 | 10/30/95 | Purchase Order Boilerplate for Support/Metrology   |
| C951173-00-O | R. J. Puigh            |                 | 10/24/95 | Updated labor Rates for Hanford Construction   |
| C951174-00-O | Ed Jasnow              |                 | 11/1/95  | P.O. PC184279 with Stranco, Inc. for Rough Grading at Livingston Site  |
| C951174-01-O | Ed Jasnow              |                 | 10/31/95 | Change Order #1 to P.O. PC184279 with Stranco  |
| C951174-02-O | Ed Jasnow              |                 | 1/19/96  | Change Order #2 to P.O. PC184279 with Stranco - Concrete Slabs Over Pipeline   |
| C951175-00-O | Rick Savage            |                 | 11/8/95  | Minutes of LIGO Facilities Performance Predictions Preview Meeting held 26 October 1995  |
| C951176-00-O | Ed Jasnow              |                 | 10/31/95 | Notice of Award, P.O. PC184279 - Rough Grading of the LIGO Site at Livingston, Louisiana   |
| C951177-00-D | Jean Siomkos           | CD-JMS-2603     | 10/30/95 | Transmittal of Signed TDM 3  |
| C951178-00-I | Irena Petrac           |                 | 11/1/95  | P.O. PP184342 with National Institute of Standards and Technology (NIST) for Expert Metrology Services in Support of the Optics Development for LIGO                 |
| C951178-01-I | Irena Petrac           |                 | 1/9/96   | Change Order #1 to P.O. PP1848342 with the National Institute of Standards & Technology (NIST) - Performance Extension   |
| C951178-02-I | Irena Petrac           |                 | 2/28/96  | Change Order #2 for P.O. PC184342 with National Institute of Standards & Technology (NIST) - Full Scope of Work for Metrology Validation                             |
| C951178-03-I | Irena Petrac           |                 | 5/1/96   | Change Order #3 for P.O. PC184342 with National Institute of Standards & Technology (NIST) - Change in Scope of Work to Include the Full Metrology Validation Effort |
| C951179-00-D | Andreas Nonnenmacher   |                 | 11/1/95  | Weekly Report  |
| C951179-04-I | Ed Jasnow              |                 | 7/2/96   | Change Order Number 4 - P.O. PC 84342.   |
| C951181-00-O | Kai Ramsing            |                 | 11/1/95  | Completed Datasheet for Energy   |
| C951182-00-P | Irena Petrac           |                 | 11/1/95  | HDOS Non-Disclosure Agreement  |
| C951183-00-P | Irena Petrac           |                 | 11/2/95  | Advance copy of P.O. PP184342 with NIST  |
| C951184-00-D | Andreas Nonnenmacher   |                 | 11/2/95  | Weekly Cost Summary, Week Ending 27 October 1995   |
| C951187-00-D | Dr. Chris Walsh        |                 | 11/6/95  | Weekly Status Report, Week ending 6 November 1995  |
| C951189-00-O | Otto Matherny          |                 | 11/7/95  | Request to Forward "Geotechnical Investigation of the LIGO Site" to Stranco  |
| C951190-00-P | Irena Petrac           |                 | 11/7/95  | Transmittal of Change Order #2 for P.O. PC 162519 (LIGO-C950494-02-I)  |
| C951191-00-P | Irena Petrac           |                 | 11/7/95  | Transmittal of Draft P.O. PC 185384 with Craig Conley  |
| C951192-00-O | Rick Savage            |                 | 11/7/95  | Transmittal of CDRL PAR-FDCM005AB1A01 and PAR-FDCM005AB2A01-2, Sec. 16   |
| C951193-00-D | Prof. Katherine Creath |                 | 10/20/95 | LIGO Summary of Work Between July 21 and October 20, 1995 (10 days)  |
| C951194-00-P | Jean Siomkos           | CD-JMS-2606     | 11/6/95  | HDOS Proprietary Information Non-Disclosure Agreement for CIT-LIGO Signature   |
| C951195-00-O | Ed Jasnow              |                 | 11/7/95  | Notice to Proceed with Contract #PC 1814279 (LIGO-C951174-00-O), Rough Grading of the LIGO Site at Livingston  |
| C951196-00-O | Otto Matherny          |                 | 11/8/95  | Notification of Selection of Stranco and Return of Bid Bond  |
| C951197-00-O | Otto Matherny          |                 | 11/8/95  | Notification of Selection and Return of Bid Bond   |
| C951199-00-O | Karl Drobny            | 951105-0        | 11/6/95  | Minutes of Pre-Construction Conference with Stranco, Inc. on 3 November 1995   |
| C951200-02-P | Doug Jungwirth         |                 | 5/22/96  | Change Order No. 2 for P.O. PC185584 With Brian Loucks.  |
| C951200-02-P | Irena Petrac           |                 | 5/22/96  | Change Order No. 2 for P.O. PC185584 With Brian Loucks.  |
| C951201-00-D | Andreas Nonnenmacher   |                 | 11/13/95 | Cost Summary through 10 November 1995  |
| C951202-01-P | Irena Petrac           |                 | 11/6/95  | Change Order #1 for P.O. PC185630 with Hytec, Inc. for Professional Engineering Services   |
| C951202-02-P | Irena Petrac           |                 | 2/28/96  | Change Order # 2 for P.O. PC185630 with Hytec, Inc. - Extension for Performance Period through 31 December 1996  |
| C951202-03-P | Irena Petrac           |                 | 6/17/96  | Change Order #3 to P.O. PC185630 with Hytec, Inc.  |
| C951203-00-D | Dr. Chris Walsh        |                 | 11/13/95 | Weekly Report to 13 November 1995  |
| C951204-00-P | Mike Khan              | 1307866-1       | 11/9/95  | Quotation for HP Deskjet Postscript Printer  |
| C951205-00-P | Mike Khan              | 1307866-1       | 11/13/95 | Quotation for HP Deskjet Postscript Printer  |
| C951206-00-P | George A. Grant, Inc.  |                 | 11/13/95 | Quotation for SPARCserver  |
| C951207-00-P | George A. Grant, Inc.  |                 | 11/9/95  | Quotation for SPARCserver  |
| C951208-00-P | Diane Sechrist         | SA887           | 11/9/95  | Quotation and Specification Sheets for Spectrum Analyzer   |
| C951209-00-P | Chris Humphreys        | 125-130         | 11/8/95  | Revised Cost Estimate for PSI Jefferson Proposal (LIGO-C9510153-00-O)  |
| C951210-00-P | Mike Torrance          |                 | 11/8/95  | Quotation and Spec Sheet for a 1064mm Faraday Isolator   |
| C951211-00-O | Jan Szwed              |                 | 11/3/95  | Selection of Evans-Graves Engineering as Project Surveyor in Livingston  |
| C951212-00-O | Gerald Yandell         |                 | 11/3/95  | Capline 40" Pipeline Downtime  |
| C951213-00-P | Craig Conley           |                 | 11/6/95  | Hourly Employee Contract   |
| C951214-00-O | Frank D. Dallas        |                 | 11/6/95  | Bakeout Power Connect Disconnect Procedure   |
| C951215-00-B | Lance Buboltz          | CBI-CT 2.3/0005 | 11/7/95  | Information for Article 4, Paragraph E, p. 7/10  |
| C951216-00-B | Gilbert P. Beckett     | CBI-CT 2.3/0004 | 11/3/95  | Payment Milestones   |
| C951217-01-O | William Parker         | 95-015A         | 11/2/95  | Revised Proposal for LIGO EMC/EMI Control  |
| C951218-00-O | Ara Arman              | 95B320-P        | 11/8/95  | Revised Cost Estimate for RFP EJ-223 (LIGO-C951056-00-O) for Geotechnical Field Monitoring and Testing   |

| Document No  | Full Name           | ContractorDocNo  | Doc Dt   | Full Title   |
|--------------|---------------------|------------------|----------|--|
| C951218-00-O | Richard Speer       | 95B320-P         | 11/8/95  | Revised Cost Estimate for RFP EJ-223 (LIGO-C951056-00-O) for Geotechnical Field Monitoring and Testing   |
| C951219-00-B | Larry Jones         |                  | 11/8/95  | Leak Localization Software Operation   |
| C951220-00-B | Larry Jones         |                  | 11/8/95  | CBI's Rewrite of Equipment Qualification Test Plan   |
| C951221-00-P | Yasmin Merali       |                  | 11/8/95  | Disqualification of Independent Contractor Status for Craig Conley   |
| C951222-00-V | Richard Bagley      | V049-PL-13       | 11/9/95  | Monthly Status Review Meeting Minutes for 7 November 1995  |
| C951223-00-P | Yasmin Merali       |                  | 11/9/95  | Contractor Worksheet for Craig Conley  |
| C951224-00-B | Larry Jones         |                  | 11/10/95 | Slab Loading Alignment   |
| C951225-00-O | Jeff Hermann        |                  | 11/10/95 | Check for Completed Action Items   |
| C951226-00-O | Kai Ramsing         |                  | 11/10/95 | Bakeout Sketches and Calculations  |
| C951226-00-O | John James Blasius  |                  | 11/10/95 | Bakeout Sketches and Calculations  |
| C951227-00-O | Paul Weickert       | W&G - 92185      | 11/10/95 | Preliminary Design Review, Facilities - Afterthoughts  |
| C951228-00-D | Karl Reithmaier     |                  | 11/12/95 | Drawings for the Revised TM Tilt Stage for the 30 cm Test Mass and 25 cm TM Adaptor  |
| C951229-00-P | Jean Siomkos        |                  | 11/10/95 | Corrected First Page of the HDOS Non-Disclosure Agreement  |
| C951230-00-R | Michell Cantin      | PASA-686-317     | 11/13/95 | Quotation  |
| C951231-00-O | Hal Amick, PE       |                  | 11/13/95 | Acoustical Excitation of Technical Foundation  |
| C951232-00-P | Michell Cantin      | PASA-686-317     | 11/13/95 | Quotation  |
| C951237-00-P |                     |                  | 11/30/95 | Proposal for the Design and Development Effort for the LIGO Seismic Isolation Stack (SIS)  |
| C951238-00-E | William Young       |                  | 11/14/95 | Procurement of Service from William H. Parker for Development of a LIGO EMI/EMC Procedures and Control Plan  |
| C951239-00-O | Otto Matherny       |                  | 11/15/95 | Request for Change of Scale for LIGO Topographic Survey (LIGO-C940156-00-O)  |
| C951241-00-V | Joan Collins        | 1195002 (inv. #) | 11/15/95 | Invoice, Milestone #3, dated 15 November 1995  |
| C951242-00-O | Jeff Hermann        | 951110-0         | 11/10/95 | Preliminary Design Report Presentation, PAR-FDCM009AA1X01  |
| C951244-00-V | Richard Bagley      | V049-TN-08       | 11/15/95 | Telecon of 14 November 1995 with John Worden   |
| C951246-00-D | Dale Ness           |                  | 11/16/95 | Data for the Test of Circumferential Variations for Pathfinder   |
| C951247-00-O | Mark Coles          |                  | 11/17/95 | Review Committee Report to LIGO - Preliminary Design Review (PDR) of the LIGO Observatory Civil Construction held 9 November 1995                      |
| C951251-00-P | Irena Petrac        |                  | 11/22/95 | Transmittal of Signed Proprietary Information Non-Disclosure Agreement for P.O. PC 164701 (LIGO-C950356-00-P)  |
| C951252-00-D | Dale Ness           |                  | 11/17/95 | Better Metrology Needed for Circumferential Variations in Coating Thicknesses  |
| C951253-00-B | Ed Jasnow           |                  | 11/20/95 | Proposed CBI Contract for Review and Approval  |
| C951254-01-O | Ed Jasnow           |                  | 11/20/95 | RFP EJ-224 for Surveying Support for Construction Projects in Livingston - Schedule of Services  |
| C951254-02-O | Ed Jasnow           |                  | 11/20/95 | RFP EJ 224 for Field Settlement Survey of Rough Grading Construction at Livingston Site - Statement of Work (SOW)                                      |
| C951255-00-O | Fred Asiri          |                  | 11/20/95 | Technical Direction Memorandum (TDM) 95-16 - Conditional Approval of Preliminary PDR of 1 November 1995  |
| C951256-00-O | Fred Asiri          |                  | 11/20/95 | Technical Direction Memorandum (TDM) 95-17   |
| C951257-00-O | Richard Speer       | 95B050           | 11/15/95 | Final Invoices for T.L. James Industrial Contractors, Inc.   |
| C951259-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 for Surveying Support - Livingston   |
| C951260-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 for Surveying Support - Livingston   |
| C951261-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 for Surveying Support - Livingston   |
| C951262-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 for Surveying Support - Livingston   |
| C951263-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 for Surveying Support - Livingston   |
| C951264-00-O | Ed Jasnow           |                  | 11/21/95 | Transmittal of RFP EJ-224 (LIGO-C951254-00-O) for Surveying Support, Livingston, LA  |
| C951265-00-P | Irena Petrac        |                  | 11/20/95 | P.O. PP185967 with Universal Analytics, Inc. for UAI/NASTRAN Finite Element Computer Program (shipped to Hytec)  |
| C951266-00-O | Ed Jasnow           |                  | 11/27/95 | Transmittal of RFP EJ-224 (LIGO-C951254-00-O) for Surveying Support - Livingston   |
| C951267-00-D | Dr. Chris Walsh     |                  | 11/27/95 | Weekly Status Report through 27 November 1995  |
| C951268-00-B | Marty Tellalian     | CBI-CT 2.2/0015  | 11/20/95 | Partial Payment Invoice for Completion of Task Order #95-04  |
| C951269-00-O | Fred Asiri          |                  | 11/27/95 | Technical Direction Memorandum (TDM) 95-18 - Slab LVEA   |
| C951271-00-O | Otto Matherny       |                  | 12/1/95  | P.O. PP186624 for Electrical Power with Benton County Public Utility District No. 1 (PUD) for the LIGO Site at Hanford, WA                             |
| C951272-00-D | Bill Kells          |                  | 11/22/95 | Data Analysis  |
| C951273-00-V | John Worden         | V049-PL-22       | 11/25/95 | TIM 05 - Response to PSI Needs List, dated 10 November 1995  |
| C951274-00-V | John Worden         |                  | 11/28/95 | Transmittal of TIM 05  |
| C951275-00-O | Ed Jasnow           |                  | 2/1/96   | P.O. PC186218 with Professional Service Industries, Inc. for Geotechnical Field Monitoring and Testing of the Rough Grading Construction at Livingston |
| C951276-00-P | Karen Dombrowski    |                  | 11/28/95 | Precontract Cost Authorization for P.O. PC185630 (LIGO-C951202-00-P) for Professional Engineering Services/LIGO Seismic Isolation Stack Development    |
| C951277-00-O | Fred Asiri          |                  | 11/29/95 | Facility Preliminary Design Review, 9 November 1995 - Comments   |
| C951281-00-O | Ed Jasnow           |                  | 11/29/95 | Transmittal of P.O. PC186218 for Signature   |
| C951282-00-D | Garlynn Billingsley |                  | 11/29/95 | A.R. Coating   |
| C951283-00-V | John Worden         |                  | 11/30/95 | TDM 95-05, Conditional Approval of CDRL 10 - Deliverables to the Beam Tube Final Design Data Package   |
| C951284-00-U | Mel Weingart        |                  | 11/30/95 | Transmittal of ECP 2 through 8   |
| C951287-00-O | Rirchard Fischer    |                  | 12/4/95  | Architecture Plans from the Preliminary Design of the LIGO Facility for LSU Approval   |
| C951288-02-O | Ed Jasnow           |                  | 12/20/95 | Change Order #2 Incorporating ECP's 2 through 8 for Parson's Contract P.O. PP150969  |
| C951288-03-O | Fred Asiri          | PP150969         | 5/22/96  | Change Order #3 for PO PP150969 with Parsons Incorporation of Engineering Change Proposals (ECP's) 10-14   |

| Document No  | Full Name            | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|----------------------|-----------------|----------|--|
| C951289-00-O | Fred Asiri           |                 | 12/1/95  | Transmittal of Beam Tube (BT) - Civil Construction (CC) Interface Control Document (ICD)   |
| C951291-00-O | Tim Melott           | 951122-0        | 11/22/95 | Excerpts of the PDR Submittal Drawings for LSU to use at their Architectural Review; Color renderings of the Corner Station for LSU's use  |
| C951293-00-D | Andreas Nonnenmacher |                 | 12/4/95  | Cost Summary through 1 December 1995   |
| C951295-00-O | Jeff Hermann         | 951129-1        | 12/29/95 | Facility Monitor and Control System Options, Revision 1  |
| C951296-00-B | Ed Jasnow            |                 | 12/5/95  | Revised P.O. PC181520 with CBI for NSF Review and Approval   |
| C951296-01-B | Larry Jones          |                 | 12/5/95  | Negotiation Summary for Beam Tube Contract with CBI (LIGO-C951080-00-B)  |
| C951296-01-B | Ed Jasnow            |                 | 12/5/95  | Negotiation Summary for Beam Tube Contract with CBI (LIGO-C951080-00-B)  |
| C951298-00-O | William Parker       |                 | 11/22/95 | Summary of Electromagnetic Compatibility Concerns and Topics Discussed to Date   |
| C951299-00-B | Larry Jones          |                 | 12/6/95  | Reference Monuments, Beam Tube Module Contract   |
| C951299-01-B | Larry Jones          |                 | 2/6/96   | Alignment Deliverables By LIGO, Beam Tube Module Contract (rev. 1)   |
| C951300-01-P | Phil Lindquist       |                 | 12/5/95  | Change Order #1 for P.O. PP166865 with Innovative Data Processing - Data Conversion and Extended Period of Performance to 31 March 1995  |
| C951300-02-P | Phil Lindquist       |                 | 2/19/96  | Change Order #2 for P.O. PP166865 with Innovative Data Processing - Additional Service Effort for System Completion  |
| C951300-03-P | Irena Petrac         |                 | 4/1/96   | Change Order #3 for P.O. PP166865 with Innovative Data Processing  |
| C951301-00-B | Larry Jones          |                 | 12/6/95  | Review of PSI's Beam Tube Deliverable Specifications Package   |
| C951302-00-V | John Worden          |                 | 12/6/95  | Technical Information Memorandum (TIM) 06 - Provision of Documentation for Investigating the Design of the LN Storage Vessel Foundations at Livingston and Hanford Sites   |
| C951303-00-V | John Worden          |                 | 12/7/95  | Transmittal of TDM 95-04 Approving CDRL 2, Project Management Plan   |
| C951304-00-O | Jeff Herrman         | 951204-2        | 12/4/95  | Benton County PUD Transformers   |
| C951305-00-O | Jeff Hermann         | 951204-1        | 12/4/95  | Fire Water Pump Starting and Transformer Resizing  |
| C951306-00-O | Keith J. Fournier    |                 | 12/6/95  | RFP EJ-224 (LIGO-C951254-00-O), Surveying Support, Livingston LA Site - Schedule of Services   |
| C951307-00-V | Richard Bagley       | V049-PL-027     | 12/4/95  | Change Order Request #1 - Pneumatic to Electronic Actuation of Eight Large Gate Valves   |
| C951308-00-V | Richard Bagley       | V049-PL-28      | 12/4/95  | Change Order Request #2 - Change LA Mid Stations 48 Inch Gate Valves to 44 Inch Gate Valves  |
| C951309-00-V | Richard Bagley       | V049-PL-30      | 12/5/94  | Change Order Request #3 - Design, Fabricate, and Install the Pipe Bridge at WA and LA Corner Stations  |
| C951310-00-V | Richard Bagley       | V049-PL-29      | 12/4/95  | Change Order Request #7 - Add 304L Weld Stubs to the Large Gate Valves   |
| C951311-00-B | Paul A. LoBello      |                 | 12/6/95  | Transmittal of Signed Contract for Beam Tube Modules Fabrication and Installation, Contract #PC181520, LIGO-C951080-00-B   |
| C951313-00-V | Linda Turner         |                 | 12/8/95  | Distribution of PSI Specifications V049-2-039, V049-2-040, V049-2-041, and Bill of Materials BOMV0494001   |
| C951314-00-O | Fred Asiri           |                 | 12/8/95  | TDM 95-19 - Direction to Parsons to proceed with the design of the LVEA and VEA technical foundations with a minimum thickness of 30 inches  |
| C951315-00-V | Richard Bagley       | CT009           | 11/28/95 | Bill of Materials -BSC Prototype (BOMV0494001), Specification for Stainless Steel Vessel Heads (V049-2-039), Specification for Stainless Steel Flange Forgings (V049-2-040), and Specification for Stainless Steel Vessel Plate (V049-2-041) |
| C951316-00-O | Fred Asiri           |                 | 12/8/95  | Transmittal of TDM 95-19   |
| C951319-00-V | John Worden          |                 | 12/11/95 | TDM 95-06 Approving the Purchase of the Materials Required for the BSC Prototype Vessel Fabrication  |
| C951320-00-V | John Worden          |                 | 12/11/95 | Transmittal of TDM 95-06 to PSI  |
| C951321-00-D | Dr. Chris Walsh      |                 | 12/11/95 | CSIRO Weekly Report, dated 11 December 1995  |
| C951324-00-V | Linda Turner         |                 | 12/18/95 | Distribution of CDRL # PSI-VEB001AA1B02  |
| C951325-00-V | Richard Bagley       | V049-1-013      | 12/21/94 | Washington I/O Summary   |
| C951326-00-P | Earl Friese          |                 | 12/1/95  | No-cost Extension on MIT work on PHY-9210038, Change Order No. 16  |
| C951327-00-V | John Worden          |                 | 12/12/95 | TIM 95-08 requesting quotes  |
| C951328-00-V | John Worden          |                 | 12/12/95 | Transmittal of TIM 95-08   |
| C951329-00-O | Fred Asiri           |                 | 12/12/95 | Conduit Installation on Red-Lined Facility Drawings  |
| C951330-00-D | Andreas Nonnenmacher |                 | 12/12/95 | Weekly Report, dated 12 December 1995  |
| C951331-00-O | Mel Weingart         |                 | 11/29/95 | Engineering Change Proposal (ECP) #2 - Livingston Survey Grid Adjustment   |
| C951332-00-O | Mel Weingart         |                 | 11/29/95 | Engineering Change Proposal (ECP) #3 - Additional BTE Bid Package (Hanford)  |
| C951333-00-O | Mel Weingart         |                 | 11/29/95 | Engineering Change Proposal (ECP) #4 - Mid and End Station Chiller Plant Relocation  |
| C951334-00-O | Mel Weingart         |                 | 11/29/95 | Engineering Change Proposal (ECP) #5 - BTE Support Configuration   |
| C951335-00-O | Mel Weingart         |                 | 11/29/95 | Analysis of Vacuum Load on LVEA Slab   |
| C951336-00-O | Mel Weingart         |                 | 11/29/95 | LVEA Observation Deck Design   |
| C951337-00-O | Mel Weingart         |                 | 11/29/95 | Hanford LVEA Expansion to Accommodate 3 Interferometers  |
| C951338-00-O | John S. Teagarden    |                 | 12/7/95  | Submitted Proposal for RFP EJ-224 (LIGO-C951254-00-O)  |
| C951339-00-O | M. Gregory Breaux    |                 | 12/7/95  | Submittal of Proposal for RFP EJ-224 (LIGO-C951254-00-O)   |
| C951340-00-O | Kris Showalter       |                 | 12/6/95  | Submittal of Proposal for RFP EJ-224 (LIGO-C951254-00-O)   |
| C951341-00-O | Willie J. Fontenot   |                 | 12/6/95  | Submittal of Proposal for RFP EJ-224 (LIGO-C951254-00-O)   |
| C951342-00-O | Stephen L. Hebert    |                 | 12/7/95  | Submittal of Proposal for RFP EJ-224 (LIGO-C951254-00-O)   |
| C951343-00-D | Andreas Nonnenmacher |                 | 12/12/95 | Cost Summary through 3 December 1995   |
| C951344-00-B | Ed Jasnow            |                 | 12/12/95 | Transmittal of Executed Contract # PC181520 (LIGO-C951080-00-B), Fabrication and Installation of LIGO Beam Tube Modules  |
| C951345-00-O | Ara Arman            |                 | 12/12/95 | LIGO/Livingston Site Loose and Disturbed Soil Removal  |
| C951346-00-O |                      |                 | 12/12/95 | Bid Responses for Grading and Slab in Hanford  |
| C951347-00-V | Richard Bagley       |                 | 12/12/95 | Clarifications for TDM 95-04, Project Management Plan Approval   |
| C951348-00-P |                      |                 | 12/12/95 | Quotation MicroCad disk subsystem  |
| C951349-00-P | Gilbert P. Beckett   |                 | 12/12/95 | Sample of CBI's Invoice Format   |

| Document No  | Full Name         | ContractorDocNo    | Doc Dt   | Full Title  |
|--------------|-------------------|--------------------|----------|---|
| C951350-00-O | J.V. Harmon       | 00063173 (inv. #)  | 12/8/95  | Transmittal of Invoice for Period Ending 3 November 1995  |
| C951351-00-O | J.V. Harmon       | 00060172 (inv. #)  | 12/8/95  | Transmittal of Invoice for Period Ending 3 November 1995  |
| C951352-00-O | Larry Hancock     |                    | 12/11/95 | LIGO Beam Tube Enclosure (BTE) Sitework and Fabrication - Hanford, WA                                       |
| C951353-00-O | Dave Bishop       |                    | 12/12/95 | Request for Clarification   |
| C951354-00-O | Bob Nelson        |                    | 12/12/95 | Request for Information for Bid   |
| C951355-00-V | Joan Collins      |                    | 12/12/95 | Invoice for Milestone #'s 5, 9A & 9F  |
| C951357-00-V | Richard Bagley    |                    | 12/7/95  | Monthly Status Meeting Minutes for 5 December 1995 and Agenda   |
| C951358-00-B | Lance Buboltz     |                    | 12/13/95 | Invoice for Milestone #1  |
| C951359-00-V | Raymond Ciatto    |                    | 12/14/95 | Telecon of 8 December 1995 regarding Beam Tube/Vacuum Equipment Interface Issues                            |
| C951360-00-M | John F. McDermott |                    | 12/13/95 | Proposed Changes to Cooperative Agreement   |
| C951361-00-V | Richard Bagley    |                    | 12/14/95 | Vacuum Equipment Design Audits  |
| C951361-01-V | Richard Bagley    |                    | 12/15/95 | Vacuum Equipment Design Audits, Revision 1  |
| C951362-00-O | Larry Hancock     |                    | 12/13/95 | Position Statement Justifying a Canadian Firm's Qualification to Bid under NAFTA Implementation Act         |
| C951363-00-O | Jerry Webber      |                    | 12/13/95 | Pre-Bid Questions   |
| C951364-00-O | Jeff Hermann      |                    | 12/12/95 | Minutes for the Pre-Bid Meeting for the Hanford Beam Tube Enclosure   |
| C951366-00-V | Richard Bagley    |                    | 12/13/95 | Change Order Request #8 - Design Only of LN2 Tank Foundations   |
| C951367-00-O | Jeff Hermann      |                    | 11/29/95 | Decoupled Foundation and Expansion Joint Around LVEA and VEA Foundations                                    |
| C951368-01-O | Jeff Hermann      |                    | 11/29/95 | Facility Monitor and Control System (FMCS) Options  |
| C951369-00-V | Richard Bagley    |                    | 12/18/95 | Telecon of 12/14/95 with John Worden  |
| C951370-00-P | Karun Sreerama    |                    | 12/18/95 | Quotation for Magnet Disc   |
| C951371-00-V | Richard Bagley    |                    | 12/18/95 | Change Order Request #6 - Additional BSC Bracing  |
| C951372-00-P | Karun Sreerama    |                    | 12/15/95 | West Bridge 3rd Floor Data Cables   |
| C951373-00-O | James Anderson    |                    | 12/6/95  | Pre-Bid Questions   |
| C951375-00-V | Richard Bagley    |                    | 12/11/95 | Change Order Request #4 - Add Fail Safe Gate Valves to the Main Roughing Pump Inlets                        |
| C951376-00-O | James Anderson    |                    | 12/18/95 | Bid Date Extension Request  |
| C951377-00-O | Dave Bishop       |                    | 12/18/95 | Pre-Bid Questions   |
| C951379-00-O | Fred Asiri        |                    | 12/20/95 | Transmittal of Signed ECPs 2-8  |
| C951380-0-O  | Fred Asiri        |                    | 12/20/95 | Transmittal of TDM 95-20 (LIGO-C951468-00-O) and TDM 95-21 (LIGO-C951467-00-O)                              |
| C951381-00-O | Jeff Hermann      |                    | 12/12/95 | Hanford Beam Tube Enclosure Pre-Bid Meeting Minutes for 6 December 1995                                     |
| C951382-00-B | Lance Buboltz     |                    | 12/19/95 | Project Engineering Schedule  |
| C951383-00-V | Richard Bagley    |                    | 12/20/95 | Invoice for Milestone #16, Invoice #1295021   |
| C951384-00-D | Dr. Chris Walsh   |                    | 12/12/95 | Invoice for P.O. PP167159   |
| C951385-00-V | Richard Bagley    |                    | 12/15/95 | Change Order Request #9 - Change All 44 Inch Gate Valves to 48 Inch Electric and Related Spools Changes     |
| C951386-00-V | Richard Bagley    |                    | 12/18/95 | Change Order #10 - Increase the Pumping Surface Clear Aperture of the 80K Cryopumps                         |
| C951387-00-O | Karl Drobny       |                    | 12/21/95 | Weekly Status Report, Week Ending 12/22/95  |
| C951388-00-P | Mike Keller       |                    | 12/21/95 | Approval for Revised Version of Caltech's Institute Patent Policy   |
| C951389-00-B | Lance Buboltz     |                    | 12/21/95 | Interior Fixed Support Bracket Foot Print   |
| C951390-00-O |                   |                    | 12/20/95 | Pre-Bid Questions   |
| C951391-00-V | Richard Bagley    |                    | 12/21/95 | PSI LIGO Project Internet Home Page   |
| C951392-00-B | Lance Buboltz     |                    | 12/12/95 | Foundation Loads and Valve Support at the Terminations  |
| C951393-00-O | Karl Drobny       |                    | 12/20/95 | Safety Meeting Minutes Issued by the Contractor and Correspondence Issued to the Contractor (Stranco, Inc.) |
| C951394-00-O | Bill Lockwood     |                    | 12/20/95 | Pre-Bid Questions   |
| C951395-00-P | Linda Turner      |                    | 12/29/95 | Distribution of CDRL PAR-FDCM002AA1M9511  |
| C951396-00-V | Richard Bagley    | V049-1-009, Rev. 0 | 12/1/95  | Estimated Electrical Loads  |
| C951397-00-V | Richard Bagley    | V049-1-010, Rev. 0 | 12/21/95 | Preliminary Estimate of Cooling Water Heat Loads  |
| C951398-00-O | Mel Weingart      |                    | 12/27/95 | LIGO Verification and Operational Demonstration Matrix  |
| C951399-00-O | Tim Melott        |                    | 12/19/95 | Electromagnetic Compatibility   |
| C951400-00-O | Tim Melott        |                    | 12/21/95 | Mid/End Station CDS and Vacuum Equipment Cooling Loads  |
| C951401-00-O | Jeff Hermann      |                    | 12/19/95 | Record of Telephone Conversation re. Dimensional Tolerance for BTE Slab                                     |
| C951402-00-B | Lance Buboltz     |                    | 12/15/95 | Notification of Early Release for Tubemill Weld Equipment Purchase  |
| C951403-00-O | Karl Drobny       |                    | 12/15/95 | Status Report, Period Ending 15 December 1995   |
| C951404-00-O | Karl Drobny       |                    | 12/15/95 | Stranco Invoice #6856   |
| C951405-00-O | Karl Drobny       |                    | 12/13/95 | Minutes of Construction Meeting with Stranco held on 12 December 1995                                       |
| C951406-00-V | Richard Bagley    |                    | 11/27/95 | Transmittal of Updated Meeting Minutes for Project Meetings 1 through 5 (CDRL 08)                           |
| C951407-00-O | Edith Mshila      |                    | 12/19/95 | Pre-Bid Questions   |
| C951407-00-O | Dave Kappers      |                    | 12/19/95 | Pre-Bid Questions   |
| C951408-00-P | Karen Mercado     |                    | 12/19/95 | LIGO Contracts with PSI and Rough Grading Contract  |

| Document No  | Full Name            | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|----------------------|-----------------|----------|---|
| C951409-00-R | Hank Banas           |                 | 12/19/95 | Quotations  |
| C951410-00-P | Jim Cheshire         |                 | 12/19/95 | Request for Invoice Approval  |
| C951411-00-O | Dave Bishop          |                 | 12/15/95 | Pre-Bid Questions   |
| C951412-00-O | Jeff Hermann         |                 | 12/19/95 | Tolerances  |
| C951413-00-O | Tim Melott           |                 | 12/26/95 | Response to TDM 95-21 re. Lightning Protection  |
| C951414-00-B | Lance Buboltz        |                 | 12/22/95 | Requests for Information #1-3   |
| C951415-00-B | Karen Sandberg       |                 | 12/11/95 | Approval of Subcontract with CBI  |
| C951416-00-O | Karl Drobny          |                 | 12/28/95 | Livingston Field Office Telephone/FAX Numbers and Address   |
| C951417-00-O | Larry Swartz         |                 | 12/28/95 | Pre-Bid Questions   |
| C951418-00-O | Angie Morrin         |                 | 12/27/95 | Request for List of Plan Holders  |
| C951419-00-D | Ramin Lalezari       |                 | 12/27/95 | Suitable Mirror Cleaning Method   |
| C951420-00-O |                      |                 | 12/27/95 | Check for Plans/Drawings for IFB JT222  |
| C951421-00-O | Larry Swartz         |                 | 12/26/95 | Pre-Bid Questions   |
| C951422-00-O | Jack C. Williams     |                 | 12/21/95 | Pre-Bid Question re Pre-Cast Concrete Enclosures  |
| C951423-00-V | Joe Mansberger       |                 | 12/22/95 | Answers to Questions re Multi-Vac Ion Pump Controller   |
| C951424-00-D | Ramin Lalezari       |                 | 12/22/95 | ULE Cavities  |
| C951425-00-P | Steve Clayton        |                 | 12/21/95 | Quotation for Installation of Data Cables - West Bridge 3rd Floor   |
| C951426-00-O | Phil Gilmore         |                 | 12/26/95 | Pre-Bid Questions   |
| C951427-00-O | Doug Barab           |                 | 12/26/95 | Recommended Location for Electrical Lines   |
| C951428-00-B | Lance Buboltz        |                 | 1/3/96   | Purchase Order Submittal to Caltech: P.O. #95111400001 (PRD for Pipe Mill)  |
| C951429-00-O |                      |                 | 12/29/95 | Invoice for Job #402117 for Period Ending 1 December 1995   |
| C951430-00-O |                      |                 | 12/29/95 | Invoices for Job #s 402117, 402118 & 402120 for period Ending 1 December 1995   |
| C951431-00-O | Tim Melott           |                 | 12/27/95 | OSB Design Criteria/Assumptions   |
| C951432-00-V | Richard Bagley       |                 | 12/27/95 | Telecon with John Worden on 21 December 1995  |
| C951433-00-D | Andreas Nonnenmacher |                 | 10/13/95 | Cost/Manhour Summary and Metrology Flow   |
| C951434-00-O | Mel Weingart         | CM-951118-F01   | 11/21/95 | Construction Sign to Be Provided by Stranco   |
| C951435-00-P |                      | W95-5777        | 11/21/95 | Quotation from VMIC   |
| C951436-00-O | Jeff Hermann         | 951120-0        | 11/30/95 | Technical Interchange Meeting - Grounding and Shielding Meeting Minutes for 20 November 1995  |
| C951437-00-V | Richard Bagley       | V049-PL-020     | 11/27/95 | Large Gate Valve Weld Stubs   |
| C951438-00-P | Joseph Binsack       |                 | 11/27/95 | Extension of Contract PP045667 with MIT   |
| C951439-00-P | William O. Miller    |                 | 11/26/95 | Additional Information Requested for LIGO-C951202-00-P  |
| C951440-00-O | Kathie Smith         |                 | 11/21/95 | Beam Tube Slab - Hanford  |
| C951441-00-O | Jeff Hermann         |                 | 11/27/95 | Facility Monitoring and Control Systems Options Worksheet   |
| C951442-00-D | Andreas Nonnenmacher |                 | 11/27/95 | Cost Summary for Pathfinder Expenditures through 24 November 1995   |
| C951443-00-O | Tom Reynolds         |                 | 12/8/95  | Pre-Bid Questions   |
| C951444-00-O | Jim McKenney         |                 | 12/8/95  | Pre-Bid Questions   |
| C951445-00-O | Jerry Seuzeneau      |                 | 12/8/95  | Pre-Bid Questions   |
| C951446-00-O | James Brookhouser    |                 | 11/8/95  | Request Authority to Subcontract with Outside Associate   |
| C951447-00-B | Larry Jones          |                 | 12/7/95  | Beam Tube/Vacuum Equipment Interface  |
| C951448-00-O | Mike Mitchell        |                 | 12/8/95  | Pre-Bid Questions   |
| C951449-00-O | Karl Drobny          | CM-951207-F01   | 12/8/95  | Weekly Status Report for Livingston   |
| C951450-00-P | Irena Petrac         |                 | 12/12/95 | Close-out Invoice for LANL Work Order with Los Alamos   |
| C951451-00-P | Irena Petrac         |                 | 12/13/95 | Work Order with Los Alamos Laboratory   |
| C951452-00-D |                      | 3656            | 12/8/95  | Quotation for Polishing LIGO Pathfinder Test Mass Blanks from General Optics, Inc.  |
| C951453-00-P | Irena Petrac         |                 | 12/13/95 | Work Order with Los Alamos National Laboratory  |
| C951454-00-V | John Worden          |                 | 12/13/95 | Approval of Project Management Plan (TDM 95-04)   |
| C951455-00-V | John Worden          |                 | 12/13/95 | Transmittal of Concurrence Letter for TDM 95-04   |
| C951456-00-B | Larry Jones          |                 | 12/14/95 | Transmittal of Construction Bid Package for Hanford Beam Tube Enclosure   |
| C951457-00-D | Dale Ness            |                 | 11/17/95 | Coating Options for Test on 18-19 December 1995   |
| C951458-00-P | Irena Petrac         |                 | 12/14/95 | P.O. # PC188099 with Butler Services Group for Technical Support Consisting of CAD Design Services                                    |
| C951459-00-B | Larry Jones          |                 | 12/15/95 | Information Regarding the Monitoring of Spiral Weld Quality (CDRL #15)  |
| C951460-00-P | Irena Petrac         |                 | 12/18/95 | P.O. PC 188097 with Cygnus Laser Corporation for the Development of Computer Modeling Capability for the Recycled LIGO Interferometer |
| C951461-00-D | Dr. Chris Walsh      |                 | 12/18/95 | Weekly Report, dated 18 December 1995   |
| C951462-00-P | Irena Petrac         |                 | 12/19/95 | Transmittal of P.O. PC157708 (LIGO-C950587-06-P)  |
| C951463-00-P | Irena Petrac         |                 | 12/19/95 | Transmittal of P.O. PC 188099 (LIGO-C951458-00-P)   |
| C951464-00-O | Ed Jasnow            |                 | 12/19/95 | Temporary Power for the LIGO Construction site at Livingston, LA  |
| C951466-00-O | Ed Jasnow            |                 | 12/20/95 | Addendum No. 1 to IFB # JLT 222 for Sitework and Precast Fabrication at Hanford, Washington   |

| Document No  | Full Name          | ContractorDocNo    | Doc Dt   | Full Title   |
|--------------|--------------------|--------------------|----------|--|
| C951467-00-O | Fred Asiri         |                    | 12/21/95 | TDM 95-21: Review and Incorporation into Design and Cost for Lightning Protection  |
| C951468-00-O | Fred Asiri         |                    | 12/20/95 | TDM 95-20 (Supercedes TDM 95-19), Proceed with Design of LIGO Facilities based on Requirements Stated in LIGO-T950113-05-O       |
| C951468-00-P | Irena Petrac       |                    | 12/20/95 | Advance Copy of Purchase Order for Review  |
| C951470-00-V | John Worden        |                    | 12/21/95 | Technical Information Memorandum (TIM) 95-09 - Informing PSI of CIT's Decision NOT to Act on Change Order Requests               |
| C951471-00-V | John Worden        |                    | 12/21/95 | Technical Information Memorandum (TIM) 95-10 - Request for Quote for Scope Reduction   |
| C951473-00-V | John Worden        |                    | 12/21/95 | Transmittal of TIM 95-09 and 95-10, and Preliminary Electrical Information for Hanford   |
| C951474-00-V | John Worden        |                    | 1/26/96  | Technical Information Memorandum (TIM) 11 - Approval of Change Order Request #7  |
| C951475-00-V | John Worden        |                    | 12/21/95 | Transmittal of TDM 95-11 to PSI re. Change Order Request #7  |
| C951476-02-O | Ed Jasnow          |                    | 12/27/95 | Addendum #2 to IFB JT 222 for Sitework and Precast Fabrication at Hanford, WA  |
| C951477-00-O | Ed Jasnow          |                    | 12/27/95 | Addendum #2 to IFB # JLT222 for Sitework and Precast Fabrication at Hanford (LIGO-C951476-02-O)                                  |
| C951478-00-D | Dr. Chris Walsh    |                    | 12/27/95 | Weekly Report to 25 December 1995  |
| C951479-00-D | Dr. Chris Walsh    |                    | 12/28/95 | Travel Quotes for Fares to Los Angeles for March Review Meeting  |
| C951481-00-B | Lance Buboltz      | CBI-CT 2.2/0016    | 12/6/95  | Equipment Qualification Test Procedure   |
| C951482-P-U  | Isaac Skelton      |                    | 12/6/95  | Extension if ISF's Grant Assistance Program (GAP) for Calendar Year 1996   |
| C951484-00-O | Jerry Seuzeneau    |                    | 12/8/95  | Pre-Bid Questions  |
| C951485-00-P | Aaron R. Asrael    |                    | 10/27/95 | Approval of Change Order 2 to REO Contract for Procurement of Large Optic Spin Cleaning Equipment                                |
| C951486-00-O | Jeff Hermann       | 951206-0           | 12/7/95  | Minutes of Meeting   |
| C951487-00-P | Willie J. Fontenot |                    | 12/8/95  | Copy of Airborne Express Receipt   |
| C951488-00-P |                    |                    | 12/7/95  | Quotation from Jupiter Systems   |
| C951489-00-V | Raymond Ciatto     | V049-PL-032        | 12/8/95  | 48 Inch Expansion Bellows  |
| C951490-00-O | Karun Sreerama     |                    | 12/8/95  | Pre-Bid Questions  |
| C951491-00-P |                    | 3656               | 12/8/95  | Quotation for Polishing LIGO Pathfinder Test Mass Blanks from General Optics, Inc.   |
| C951492-00-O |                    |                    | 12/8/95  | Pre-Bid Questions  |
| C951493-00-B | Larry Jones        |                    | 12/8/95  | Vacuum Equipment Interface Issues  |
| C951494-00-V | Dick Curtis        | V049-TN-014        | 12/8/95  | BSC Prototype Long Lead Material   |
| C951495-00-C |                    |                    | 12/8/95  | Actions Required for Evaluation Version of Sammi 4.0   |
| C951496-00-O |                    |                    | 12/8/95  | Pre-Bid Questions  |
| C951497-00-O | Dave Bishop        |                    | 12/8/95  | Pre-Bid Questions  |
| C951498-00-O | Edith Mshila       |                    | 12/8/95  | Pre-Bid Questions  |
| C951498-00-O | Dave Kappers       |                    | 12/8/95  | Pre-Bid Questions  |
| C951499-00-O | Jerry Kemp         |                    | 12/8/95  | Pre-Bid Questions  |
| C951500-00-B | Larry Jones        |                    | 6/15/95  | Required Changed in the Detailed Design of the Beam Tube Modules   |
| C951501-00-B | Larry Jones        |                    | 6/21/95  | Required Changes for Detailed Design of the Beam Tube Modules  |
| C951502-00-P |                    |                    | 10/6/95  | Quotation for QMG421 from Balzers  |
| C951503-00-O | Paul MacCalden     |                    | 10/6/95  | Preliminary Vibration Amplitudes of the Air Handling Foundations for the Corner, Mid, and End Stations                           |
| C951504-00-O | Jeff Hermann       | 950110-1           | 1/15/95  | Kick-Off Meeting Minutes for 10 January 1995   |
| C951505-00-O | Mike Tohidian      | 0695-1091, Supmt 1 | 10/31/95 | Estimated Cost Breakdown for Construction Materials Engineering and Testing Services in Livingston                               |
| C951506-00-O |                    |                    | 10/31/95 | Preliminary Cost Estimate Breakdown  |
| C951507-00-B | Paul A. LoBello    |                    | 10/31/95 | Proposed Changes to Commercial Provisions for RFP KD 215 Options   |
| C951508-00-O | Frank D. Dallas    |                    | 10/31/95 | Revised Power Sales Contract   |
| C951509-00-V | Richard Bagley     | V049-PL-09         | 11/1/95  | Telecon with John Worden on 1 November 1995  |
| C951510-00-V | Dick Curtis        | V049-TN-06         | 11/2/95  | Telecon Between Dick Curtis and Allen Sibley re. Clarification/Update of What LIGO Will Supply for PSI's Electrical Requirements |
| C951511-00-V | Richard Bagley     | V049-PL-10         | 11/2/95  | PDR Update Package (CDRL 1) Preliminary Comments   |
| C951512-00-O | Frank D. Dallas    |                    | 10/27/95 | Power Sales Contract   |
| C951513-00-O | Andrew Navarre     |                    | 11/2/95  | Sketch of LIGO/EPC Crossing Pad  |
| C951514-00-P | Joseph Binsack     |                    | 10/30/95 | Calculations Regarding MTDC and CSR Bases  |
| C951515-00-D | Chris Evans        |                    | 11/2/95  | Metrology Proposal for Core Optics, DRAFT  |
| C951516-00-M | Paul Gilbert       |                    | 10/13/95 | Advance Copy of Section 2 of the Committee Report in Final Draft Form  |
| C951517-00-V | Richard Bagley     |                    | 8/24/95  | PSI Comments on Statement of Work (LIGO-C950330-00-P)  |
| C951518-00-P | Rai Weiss          |                    | 8/24/95  | Authorization to Purchase Equipment PP045667   |
| C951519-00-D | Pauline Loo        | 40718              | 8/24/95  | Invoice Billing  |
| C951520-00-O | Atia Atia          |                    | 11/29/95 | Heat Gains at LVEA Building  |
| C951521-00-U | Jeff Hermann       | 951129-1           | 11/29/95 | Facility Monitor and Control System Options, Draft   |
| C951522-00-P | Alla Rabinovich    |                    | 11/28/95 | Grant Cost Activity for November 1995  |
| C951523-00-O | Jeff Hermann       |                    | 11/14/95 | Alternates for Beam Tube Enclosure   |
| C951524-00-O | Hal Amick, PE      |                    | 11/14/95 | Vibration Isolation Under Mechanical Equipment, PDR Presentation   |
| C951525-00-P | Jim Cheshire       |                    | 11/14/95 | Invoice Billing  |



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| C951526-00-P |                   |                    | 11/14/95 | Quotation for Baffle Oxidation from Certified Steel Treating Corporation         |
| C951527-00-V | Richard Bagley    | V049-TN-08         | 11/14/95 | Telecon of 14 November 1995 with John Worden                                     |
| C951528-00-O | Paul Weickert     | 92185              | 11/14/95 | Preliminary Design Review (PDR), Facility - Hanford                              |
| C951529-00-O | Jeff Hermann      |                    | 11/14/95 | Summary of Work Section from IFB JLT 222   |
| C951530-00-O | Jeff Hermann      |                    | 11/15/95 | Unit Price Section of IFB JLT 222  |
| C951531-00-O | Hal Amick, PE     |                    | 11/15/95 | Vibration Analysis of Optical Baffles  |
| C951532-00-D | Michael Sutcliffe |                    | 11/15/95 | Air Filters  |
| C951533-00-V | Richard Bagley    | V049-TN-09         | 11/16/95 | Telecon of 16 November with John Worden  |
| C951534-00-O | Karl Drobny       | CM-951117-F01      | 11/17/95 | Weekly Status Report - Livingston  |
| C951535-00-P | Gus West          |                    | 11/17/95 | Additional Information from Butler Service Group for a CAD Designer              |
| C951536-00-V | Richard Bagley    | V049-PL-017        | 11/17/95 | Approval of CDRL 2 - Project Management Plan                                     |
| C951537-00-P |                   |                    | 11/20/95 | Quotation for Software Development Kits from Kinesix                             |
| C951538-00-V | Raymond Ciatto    | V049-PL-16         | 2/16/96  | Calculations for Beam Splitter Deflections                                       |
| C951539-00-O | Jeff Hermann      |                    | 11/20/95 | Invitation to Bidders for JLT 222 - Sitework and Fabrication at Hanford          |
| C951540-00-V | Raymond Ciatto    |                    | 12/11/95 | BSC - Nozzle Locations   |
| C951541-02-P | Irena Petrac      |                    | 2/6/96   | Change Order #2 for P.O. PX166615 with Karl Reithmaier for Performance Extension |
| C951544-00-O | Atia Atia         | MU-951114-O        | 11/21/95 | Temperature Profile in the LVEA  |
| C951545-00-O | Ron May           |                    | 11/20/95 | Livingston Easement and Right-of-Way   |
| C951548-00-M | Sandy Pool        | 1410199 (inv. #)   | 10/26/95 | Billing for Legal Services from Perkins Coie, dated 20 October 1995              |
| C951549-00-M | Sandy Pool        | 38-115828 (inv. #) | 11/17/95 | Invoice for Legal Services from Kean, Miller, Hawthorne                          |
| C951550-00-M | Sandy Pool        | 29-114445 (inv. #) | 11/17/95 | Invoice for Legal Services from Kean, Miller, Hawthorne, dated 31 October 1995   |
| C951551-00-O | James A. Beard    |                    | 8/31/95  | LIGO Site Clearing Project , Safety Performance Summary - Livingston             |
| C951552-00-O | Benton PUD        |                    | 9/1/95   | Proposal for Bake-Out Power  |
| C951553-00-O |                   |                    | 3/12/93  | Rate Schedules and Charges for Louisiana by Gulf States Utilities Co.            |
| C951554-00-O | Otto Matherny     |                    | 12/11/95 | Power Line Easement for the Livingston Site                                      |
| C951555-00-O | Jim E. Curtis     |                    | 8/16/95  | Power Line Easement  |
| C951556-00-O | Otto Matherny     |                    | 8/2/95   | Cost Estimates for High Voltage Lens and Transformers                            |
| C951557-00-O | Bruce Etzel       |                    | 7/21/95  | Summary Proposal for Providing Electrical Service at Hanford                     |
| C951558-00-O | Bruce Etzel       |                    | 9/1/95   | RFP Bid Questions  |
| C951559-00-O | Bruce Etzel       |                    | 9/5/95   | Answers to the Four Questions Referred to in the Letter Dated 8/23/95            |
| C951560-00-O | Karun Sreerama    |                    | 11/8/95  | Ligo Project Law Proposal HP-9983-95C Project Cost Estimate                      |
| C951561-00-D | Chris Evans       |                    | 12/1/95  | Optics Installation Procedure  |
| C951562-00-V | Richard Bagley    | VO49-PL-23         | 11/27/95 | Technical Direction Memorandum No. 05  |
| C951563-00-O | Jan Szwed         |                    | 12/3/95  | Estimated Sales Tax For Ligo Livingston Project                                  |
| C951564-00-P | Jean Siomkos      | PC164701           | 11/13/95 | Proprietary Information Non-Disclosure Agreements                                |
| C951565-00-V | Joan Collins      |                    | 12/1/95  | Invoice for Milestone 9B   |
| C951566-00-O | Dick Curtis       | VO49-TN-11         | 11/21/95 | BSC Chamber & Nozzle "B & C" ID's  |
| C951568-00-B | Marty Tellalian   |                    | 11/13/95 | Updated Master Procedures List for Current Scope of Work.                        |
| C951569-00-V | Richard Bagley    | V049-TN-12         | 11/24/95 | BSC Deflection Due to Vacuum Load.   |
| C951570-00-V | Richard Bagley    | V049-TN-13         | 11/29/96 | Telecon of 11/28/95 With John Worden.  |
| C951571-00-V | Richard Bagley    | V049-TN-10         | 11/17/95 | Discussion of I.D. Dimensions of BSC Chamber With Contract Tolerances.           |
| C951572-00-O | Tyler Jackson     |                    | 1/20/95  | Ligo Weekly Activity Report for Weekending 1/20/95                               |
| C951573-00-O | Jeff Hermann      |                    | 1/10/95  | Minutes from Kick-off Meeting  |
| C951574-00-O | Bill Byrd         |                    | 9/15/96  | Proposal from Stranco  |
| C951575-00-V | Richard Bagley    | VO49-TN-14         | 11/30/95 | Telecon Notes of 11/29/95 with John Worden                                       |
| C951576-00-O | Jim Pardue        |                    | 12/11/95 | Pre-Bid Questions  |
| C951577-00-O | Dave Kappers      |                    | 12/11/95 | Hanford Beam Tube Enclosure Pre-Bid Questions                                    |
| C951577-00-O | Robert Seghetti   |                    | 12/11/95 | Hanford Beam Tube Enclosure Pre-Bid Questions                                    |
| C951578-00-P | Marty Campbell    | 9512110260MJC      | 12/11/95 | Quotation - Cybernetics  |
| C951579-00-P | Denise Pothoff    |                    | 12/19/95 | Cost Elements Breakdown  |
| C951580-00-O | Karl Drobny       |                    | 12/19/95 | Field Work Directive for Stranco   |
| C951581-00-O | Karl Drobny       | 951118-FPC-01      | 11/20/95 | RFI #4 - Survey Monuments for Rough Grading                                      |
| C951582-00-V | Richard Bagley    | VO49-PL-018        | 11/18/95 | LIGO Vacuum Equipment Procurement  |
| C951583-00-P | Jim Cheshire      | MJC-SMV256635      | 11/14/95 | Verification of Service and Invoice Approval                                     |
| C951584-00-O | Karl Drobny       | CM-951201-F01      | 12/1/95  | Weekly Status Report   |
| C951585-00-O | J.V. Harmon       | Inv.#00060159      | 11/21/95 | Transmittal of Invoice #00060159   |
| C951586-00-O | J.V. Harmon       | Inv.#00055992      | 11/21/95 | Transmittal of Invoice No. 00055992  |

| Document No  | Full Name               | ContractorDocNo    | Doc Dt   | Full Title   |
|--------------|-------------------------|--------------------|----------|--|
| C951588-00-O | Fred Asiri              |                    | 7/21/95  | Transmittal of Drawings  |
| C960000-00-U |                         |                    | 5/30/96  |  |
| C960001-00-P | William O. Miller       |                    | 1/2/96   | Invoice for Work Performed in December 1995  |
| C960002-00-O | Fred Asiri              |                    | 1/3/96   | Transmittal of LIGO-E950108-00-E   |
| C960003-00-O | Fred Asiri              |                    | 1/3/96   | Transmittal of LIGO-E950106-00-E   |
| C960004-00-O | Fred Asiri              |                    | 1/3/96   | Transmittal of LIGO-E950098-00-E   |
| C960005-00-P | Irena Petrac            |                    | 1/2/96   | Transmittal of Exhibit 1, Special Provisions (LIGO-C951460-00-P01)   |
| C960006-00-O | John James Blasius      |                    | 1/3/96   | Rough Grading Amendment  |
| C960007-00-P | Struct. Dyn. Res. Corp. |                    | 1/2/96   | 44303.09252  |
| C960008-00-O | Joe Correy              |                    | 1/2/96   | Pre-Bid Questions  |
| C960009-00-B | Lance Buboltz           |                    | 1/2/96   | Draft Meeting Agenda for Project Status Review, 8 January 1996   |
| C960010-00-O | Ed Jasnow               |                    | 1/5/96   | Undercut Requirement for the LIGO Rough Grading Work in Livingston (P.O. PC 186218, LIGO-C951275-00-O), Amendment  |
| C960014-00-P | Irena Petrac            |                    | 1/3/96   | Transmittal of P.O. PC 188097 (LIGO-C951460-00-P) with Cygnus Laser Corp.  |
| C960015-00-B | Marty Tellalian         |                    | 1/4/96   | Expansion Joint Calculations by Hyspan   |
| C960016-00-B | Ed Jasnow               |                    | 1/5/96   | Revised Request for Change for Data Acquisition  |
| C960017-00-O |                         |                    | 1/4/96   | Bid Proposal for IFB JT 222  |
| C960018-00-O |                         |                    | 1/4/96   | Bid Proposal to IFB JT 222   |
| C960019-00-O |                         |                    | 1/4/96   | Bid Response to IFB JT 222   |
| C960020-00-O |                         |                    | 1/4/96   | Bid Response to JT 222   |
| C960021-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960022-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960023-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960024-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960026-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960027-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960029-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960030-00-O |                         |                    | 1/4/96   | Bid Proposal for JT 222  |
| C960031-00-P | Fred Asiri              |                    | 1/5/96   | Transmittal of LIGO-E950098-A-F  |
| C960031-11-O |                         |                    | 3/12/96  | Southeast arm at station 118+00 excavating for fill with minimum amount of moisture.                               |
| C960031-12-O |                         |                    | 3/12/96  | Southeast arm at station 131+00 excavating for berm fill.  |
| C960032-00-O | Andrew Navarre          |                    | 12/11/95 | Concrete Slab  |
| C960033-00-D | Dr. Chris Walsh         |                    | 1/8/96   | Paper on a Measurement Technique for Characterising Small Scale Length Surface Errors in Optical Substrates        |
| C960033-06-P | Ed Jasnow               |                    | 1/9/96   | Change Order #6 to P.O. PC091363 with Woodward-Clyde   |
| C960034-00-D | Garilynn Billingsley    |                    | 1/8/96   | Transmittal of CSIRO Preliminary Information (LIGO-C960033-00-D)   |
| C960035-00-F | Gerry Stapfer           |                    | 4/16/96  | Building Design Process  |
| C960035-00-V | Richard Bagley          | V049-2-005, Rev. 3 | 1/5/96   | Specification for 112 and 122 CM Gate Valves for LIGO Vacuum Equipment   |
| C960036-00-V | Richard Bagley          |                    | 1/5/96   | Specification for 112 and 122 CM Gate Valves for LIGO Vacuum Equipment (V049-2-005, Revision 3)                    |
| C960037-00-O | James Anderson          |                    | 1/4/96   | Pre-Bid Questions  |
| C960038-00-O | Kai Ramsing             |                    | 1/4/96   | OSB Electrical and Heating Load, Revised   |
| C960039-00-P | McMaster-Carr Supp. Co. |                    | 1/4/96   | Quotation for Short Size Stainless Steel Spring Plunger  |
| C960040-00-V | Jerry Seuzeneau         |                    | 1/5/96   | Liquid Nitrogen Pricing for LIGO Project at Livingston   |
| C960041-00-O | Ray Holder              |                    | 1/5/96   | Parsons Review Comments on fhte Stranco, Inc. Quality Control Program  |
| C960042-00-P | McMaster-Carr Supp. Co. |                    | 1/4/96   | Quotation for Short Size Stainless Steel Spring Plunger  |
| C960042-00-V | John Worden             |                    | 1/12/96  | Meeting held Friday, 12 January 1996 to Resolve Several Outstanding Vacuum Equipment Issues                        |
| C960043-00-O | Ray Holder              | F-HO-0004          | 2/8/96   | Field Weekly Report - Livingston, dated 8 February 1996  |
| C960044-00-P | Felix Fernandez         |                    | 1/4/96   | Quotation for AutoCAD Level 1 Training   |
| C960045-00-O | Kai Ramsing             |                    | 1/3/96   | OSB Electrical and Heating Load, DRAFT   |
| C960046-00-V | Richard Bagley          |                    | 1/5/96   | Teleconversation of 26 October 1995 between John Worden and Rich Bagley  |
| C960047-00-P | Irena Petrac            |                    | 12/5/95  | P.O. PP185967 for UAI/Nastran Finite Element Computer Program for Hytec  |
| C960048-00-V | Stu Motew               |                    | 1/5/96   | Portable Water Chillers  |
| C960049-00-D | A. Rohay                |                    | 1/5/96   | Livingston Corner: RMS and Median Spectra  |
| C960050-00-D | A. Rohay                |                    | 1/5/96   | Livingston West End: RMS and Median Spectra  |
| C960051-00-D | A. Rohay                |                    | 1/5/96   | Livingston South End: RMS and Median Spectra   |
| C960052-00-V | Tom Starr               |                    | 12/5/95  | Proposed Meeting Agenda for Design Review at GNB on 11 January 1996  |
| C960053-00-R | Jolanta Soos            |                    | 1/5/96   | Quotation for Acousto-Optic Frequency Shifter  |
| C960054-00-P | Sandi Swarthout         |                    | 1/5/96   | Estimate of Costs for Detail Design and Fabrication of the Mirror Testing Fixtures                                 |
| C960054-01-P |                         |                    | 1/10/96  | Estimate of Costs for Detail Design and Fabrication of Mirror Testing Fixtures, Revision 1, ,dated 10 January 1996 |

| Document No  | Full Name                | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|--------------------------|-----------------|---------|---|
| C960055-00-O | Ralph M. Parsons Company | WA-S-208        | 3/8/96  | Structural, End Station, Foundation Plans - Hanford   |
| C960055-00-P | Irena Petrac             |                 | 1/3/96  | Advance Copy of Change Order for FY96 Support   |
| C960056-00-P | Irena Petrac             |                 | 1/9/96  | Indemnification and Insurance/LIGO Subcontract with Butler Services Group (P.O. PC 188099, LIGO-C951458-00-P)                                 |
| C960057-00-D | Dr. Chris Walsh          |                 | 1/9/96  | CSIRO Agenda - Metrology Review for 15-16 January 1996  |
| C960058-00-O | Ed Jasnow                |                 | 1/9/97  | Results of Bid Opening for Award of Contract for Hanford Beam Tube Enclosure Sitework and Precast Fabrication (IFB JLT222, LIGO-C951476-00-O) |
| C960059-00-D | Dr. Chris Walsh          |                 | 1/9/96  | CSIRO Agenda for Metrology Review, 15-16 January 1996   |
| C960061-00-V | David Mc Williams        |                 | 1/10/96 | Mid/End Station Orientation, LN2 Tank Slab Elevation  |
| C960063-00-O | Otto Matherny            |                 | 1/12/96 | Transformers for the Hanford Site of the LIGO Project   |
| C960064-00-E | Albert Lazzarini         |                 | 1/15/96 | Minutes of Kickoff Meeting with Cygnus  |
| C960066-00-O | Ed Jasnow                |                 | 1/17/96 | Notification of ACME Materials and Construction as Winner of Bid for JLT 222 (LIGO-C951476-00-O)  |
| C960067-00-P |                          |                 | 1/10/96 | Estimate of Costs Associated with the Detail Design and Fabrication of Mirror Testing Fixtures  |
| C960068-00-B | Larry Jones              |                 | 1/19/96 | TIM - 001 Responding to RFI #4 and #5   |
| C960069-00-D | Dr. Chris Walsh          |                 | 1/9/96  | CSIRO Costs for Certification Review Meeting  |
| C960071-00-D | Gari Lynn Billingsley    |                 | 1/19/96 | Permission to Copy Metrology Review Presentation  |
| C960074-01-O | Ed Jasnow                |                 | 2/14/96 | Change Order # 1 for P.O. PC189539 with ACME Materials and Construction Co.   |
| C960076-00-P | Irena Petrac             |                 | 1/8/96  | Caltech Patent Agreement/Contractor Personnel   |
| C960077-00-D | Dr. Chris Walsh          |                 | 1/9/96  | Proposed Agenda for Metrology Review, 15-18 January 1996  |
| C960078-00-O | Ed Jasnow                |                 | 1/24/96 | P.O. PC189842 with ABMB Engineers, Inc. for Surveying Support Services in Livingston  |
| C960078-00-P | Linda Turner             |                 | 1/8/96  | Distribution of CDRL PSI-VEB009AA1X02   |
| C960078-00-U |                          |                 | 5/24/96 | This is a Test  |
| C960079-00-O | Tim Melott               |                 | 1/4/96  | Lightning Protection - Additional Information for Parson's Letter 951226-0  |
| C960080-00-V | Richard Bagley           |                 | 1/5/96  | Pump Cart Preliminary Sizing  |
| C960081-00-O | Kai Ramsing              |                 | 1/9/96  | Completed Commercial Electric Service Inquiry for Livingston  |
| C960081-00-O | Tim Melott               |                 | 1/9/96  | Completed Commercial Electric Service Inquiry for Livingston  |
| C960082-00-O | Ray Holder               |                 | 1/10/96 | Stranco's Proposal on Using PEA Gravel in Lieu of Backfill Dirt   |
| C960083-00-B | Larry Jones              |                 | 1/4/96  | Agenda for Project Status Review Meeting on 8 January 1996  |
| C960084-00-O | Jan Szwed                |                 | 1/3/96  | Stranco Proposal for Use of Concrete Slabs  |
| C960084-00-O | Ray Holder               |                 | 1/3/96  | Stranco Proposal for Use of Concrete Slabs  |
| C960085-00-O | Sandi Swarthout          |                 | 1/10/96 | BackerSeal Expanding Foam Sealant   |
| C960086-00-O | Tim Melott               |                 | 1/10/96 | Electrical/Mechanical Loads   |
| C960087-00-B | Marty Tellalian          |                 | 1/10/96 | Design Calculation from Hyspan for Different Expansion Joint Configuration  |
| C960088-00-O | John James Blasius       |                 | 1/8/96  | Record of Telephone Conversation re the Livingston GPS Survey   |
| C960090-0-O  | Mel Weingart             | PM-960111-0     | 1/11/96 | LVEA/VEA Foundation Air Gap   |
| C960091-00-O | Tim Melott               | 960111-0        | 1/11/96 | Transformers for Hanford Site of the LIGO Project   |
| C960092-00-P | Jim Cheshire             |                 | 1/12/96 | Invoices for Payment and Adjustment   |
| C960093-00-V | Richard Bagley           | V049-PL-059     | 1/12/96 | R.O.M. Price for Change Order #5 - Cooling Water Supply for the Roots and Turbo Pumps   |
| C960094-00-V | Dick Curtis              | V049-TN-22      | 1/12/96 | Mid and End Station Mechanical Room Layouts   |
| C960095-00-B | Lance Buboltz            | CBI-CT 2.3/0020 | 1/12/96 | Notification of Early Release for Purchase of Leak Test Equipment   |
| C960096-00-B | Lance Buboltz            | CBI-CT 2.2/0026 | 1/9/96  | Project Status Review Data Package - CDRL 25a (CBI-FI025AA1M9601)   |
| C960096-00-P | Linda Turner             |                 | 1/12/96 | Distribution of CDRL PAR-FDCM010AF1X01 - Preliminary Design Report, Final - Disposition of Review Comments                                    |
| C960097-00-O | Arthur Theis             |                 | 1/5/96  | LIGO Topographic Survey - Livingston  |
| C960098-00-B | Lance Buboltz            | CBI-CT 2.2/0021 | 1/15/96 | Load Applied to the Beam Tube Terminations  |
| C960099-00-O | Rick Savage              |                 | 1/16/96 | Livingston Pipelines  |
| C960100-00-O |                          |                 | 1/16/96 | 1995 Contact Directory and 1994 Financial Statement   |
| C960102-00-O | Tim Melott               |                 | 1/11/96 | Finalized Ratings of the Power Transformers for the Mid and End Stations for Hanford Site of the LIGO Project                                 |
| C960103-00-O | Tim Melott               |                 | 1/11/96 | Transformer for LIGO Hanford Site Water Pump - Supplemental Information to Parsons Letter 960111-0  |
| C960104-00-P | Linda Turner             |                 | 1/19/96 | Distribution of PSI Specification V049-2-011  |
| C960105-00-P | Linda Turner             |                 | 1/19/96 | Distribution of PSI Specification V049-2-010  |
| C960106-00-P |                          |                 | 1/19/96 | JPL Task Plan # 30-4008A for LIGO Optical Modeling  |
| C960107-00-V | Linda Turner             |                 | 1/19/96 | Distribution of PSI Specifications V049-2-001, V049-2-002, V049-0-003, V049-2-033   |
| C960111-00-D | William O. Miller        |                 | 1/22/96 | Weekly Status Report, Week Ending 19 January 1996   |
| C960112-00-O |                          |                 | 1/12/96 | Change of Company Name for Parsons  |
| C960113-00-O | Tim Melott               | 960117-0        | 1/17/96 | Cost Breakdown for the Beam Tube Enclosure Lightning Protection System and Related Contractor Experience                                      |
| C960114-00-O | Mel Weingart             | 960117-1        | 1/17/96 | Engineering Change Proposal (ECP) #9, Vacuum Equipment Location   |
| C960115-00-O | Doug Barab               |                 | 1/16/96 | Status of the LIGO Electrical Distribution System   |
| C960116-00-O | Doug Barab               |                 | 1/16/96 | Status of the Power to the LIGO Site  |
| C960117-00-P | Linda Turner             |                 | 1/25/96 | Distribution of LIGO-E960008-00-V, Specification for Piping Design and Material for the Vacuum Equipment                                      |

| Document No  | Full Name                | ContractorDocNo  | Doc Dt   | Full Title   |
|--------------|--------------------------|------------------|----------|--|
| C960117-00-V | Richard Bagley           | V049-2-037       | 1/22/96  | Specification for Piping Design and Material for Vacuum Equipment  |
| C960118-00-O | Fred Asiri               |                  | 1/23/96  | Transmittal of LIGO-C960116-00-O, LIGO-C960115-00-O, and LIGO-C960097-00-O   |
| C960119-00-P | Linda Turner             | CBI-CT-2.2/0028  | 1/23/96  | Distribution of CDRL CBI-BTF040AA1X01  |
| C960120-00-O | Mel Weingart             | 960123-1         | 1/23/96  | Hanford Beam Tube Enclosure Sitework and Precast Fabrication Contract, January 1996  |
| C960121-00-O | Mel Weingart             | 960115-0         | 1/15/96  | Livingston Rough Grading Contract - Procedure Modification   |
| C960122-00-O | Tim Melott               | 960123-0         | 1/23/96  | Moses Lake Building Frequency vs. LIGO Building Frequency due to Wind  |
| C960123-00-O | Tim Melott               | 960122-1         | 1/22/96  | Statement of Work for Survey Contractor to Support the LIGO Construction Contract  |
| C960124-00-B | Lance Buboltz            | CBI-CT-2.2/0030  | 1/22/96  | Comments on Interface Control Document (ICD) Beam Tube (BT) - Civil Construction (CC) Specification (LIGO-E950089-00-E)  |
| C960126-00-V | Richard Bagley           | V049-PL-067      | 1/24/96  | Change Order Request #15 - Add an 8" Port to the Main Ion Pumps  |
| C960127-00-B | Lance Buboltz            | CBI-CT-2.3/00XX  | 1/26/96  | Request for Information (RFI) #6 - Beam Tube Valve Soft Support  |
| C960128-00-P |                          |                  | 1/25/96  | Quotation for TP912 Board from Tadpole Technology  |
| C960129-00-B | Paul A. LoBello          | CBI-CT-2.2/0033  | 1/25/96  | Travel and Meeting Rates for Project Team  |
| C960130-00-B | Lance Buboltz            | CBI-CT 2.3/0026  | 1/24/96  | Notification of Early Release for Purchase of the Equipment and Baking Services Needed to Bake the Beam Tube and Expansion Joint Material  |
| C960131-00-B | Lance Buboltz            | CBI-CT 2.3/0027  | 1/24/96  | Notification of Early Release for Purchase of Weld Material  |
| C960131-01-O | Ralph M. Parsons Company |                  | 5/24/96  | The LIGO Project Sign.   |
| C960131-33-O | Ralph M. Parsons Company |                  | 5/24/96  | Typical Saw-Cut Joint After Initial Curing.  |
| C960132-00-B | Lance Buboltz            | CBI-CT 2.3/0028  | 1/24/96  | Notification of Early Release for Purchase of Expansion Joints   |
| C960133-00-P |                          |                  | 1/26/96  | Notification of Increase in Number for P.O. PP188362-75JH  |
| C960134-00-O |                          |                  | 1/24/96  | Invoice # 00352083 dated 18 January 1995 for period ending 29 December 1995  |
| C960135-00-O |                          |                  | 1/24/96  | Invoice #'s 00349749, 003497950, 00349751 for period through 1 December 1995   |
| C960136-00-P |                          |                  | 1/12/96  | Quotation and User's Manual for TSAT-VME System Package from Odetics   |
| C960137-00-O |                          |                  | 1/15/96  | Available Testing Agencies   |
| C960138-00-O |                          | 951213-CM/STR000 | 1/15/96  | Approval for Proposed Variance in Specifications from Stranco  |
| C960139-00-O |                          |                  | 1/15/96  | Quotes for Precast Concrete Slabs for Pipeline Crossings   |
| C960140-00-O | Richard Speer            |                  | 10/26/95 | T.L. James Worksheet of Received Retainage   |
| C960141-00-B | Marty Tellalian          |                  | 1/26/96  | Agenda for CBI Technical Services Forum: "The LIGO Project" held 8 February 1996   |
| C960142-00-O | Jan Szwed                |                  | 1/15/96  | Cost Breakdown for Concrete Slab at Shell Oil Pipeline Crossing  |
| C960144-00-P |                          | 96-C-01-17       | 1/26/96  | Quotation for Baja Boards and Cables   |
| C960145-00-O | Karl Drobny              |                  | 1/25/96  | Precast Enclosure Work and Handling Procedure Received from CBI  |
| C960146-00-P |                          | OPT-1093-011996  | 1/19/96  | Quotation for Rigid Resonator from REOI  |
| C960147-00-P |                          | 1000RM           | 1/15/96  | Quotation for RELEX Reliability Software   |
| C960148-00-P | Irena Petrac             |                  | 1/29/96  | Interim Funding for MIT and TELOS  |
| C960149-00-V | Mike Zucker              |                  | 1/19/96  | Vacuum Equipment Configuration Information   |
| C960150-00-O | Tim Melott               | 960205-0         | 2/5/96   | Statement of Work (SOW) for Quality Assurance Testing and General Field Quality Assurance Monitoring for the Construction of the Beam Tube Enclosure (BTE), Beam Tube Support Slab, Access Road and Associated Site Work at Hanf |
| C960150-00-O | Karl Drobny              | 960205-0         | 2/5/96   | Statement of Work (SOW) for Quality Assurance Testing and General Field Quality Assurance Monitoring for the Construction of the Beam Tube Enclosure (BTE), Beam Tube Support Slab, Access Road and Associated Site Work at Hanf |
| C960151-00-D | Irena Petrac             |                  | 1/15/96  | Work Order for Service of Dave Redding in Support of LIGO Optical Modeling   |
| C960152-00-D | Irena Petrac             |                  | 1/25/96  | Work Order for Dave Redding  |
| C960153-00-V | John Worden              |                  | 1/25/96  | TDM 07 - Authorization to Proceed with Purchases Prior to the FDR  |
| C960154-00-V | John Worden              |                  | 1/25/96  | Transmittal of TDM 07 - Authorization to Proceed on the Early Procurements   |
| C960155-00-D | Dr. Chris Walsh          | C143             | 1/15/96  | LIGO Metrology Review, 15-17 January 1996  |
| C960156-00-E |                          |                  | 1/24/96  | Contract License Request   |
| C960157-00-B | Larry Jones              |                  | 1/26/96  | Valve Soft Support   |
| C960158-00-B | Larry Jones              |                  | 1/29/96  | Special Contractors Meeting  |
| C960159-00-V | John Worden              |                  | 1/26/96  | TIM 12 - Approving PSI Change Order Request # 3, 4, and 11.  |
| C960160-00-V | John Worden              |                  | 1/26/96  | Transmittal of TIM 12  |
| C960161-00-O | Karl Drobny              |                  | 1/26/96  | Items for Discussion at the Pre-Construction Meeting at Hanford Site   |
| C960162-00-P | Phil Lindquist           |                  | 2/2/96   | Transmittal of Annual Report (December 1994 - November 1995)   |
| C960163-00-D | Garilynn Billingsley     |                  | 1/29/96  | Transmittal of CSIRO Trip Report and Questions and Plot from Rai Weiss   |
| C960164-00-O | Ed Jasnow                |                  | 1/29/96  | Notification of Selection for Survey Support in Livingston, P.O. PC189842 (LIGO-C960078-00-O)  |
| C960166-00-D | Dr. Chris Walsh          |                  | 1/29/96  | Weekly Report, dated 29 January 1996   |
| C960168-00-D | Andreas Nonnenmacher     |                  | 1/26/96  | Cost Summary Report, dated 26 January 1996   |
| C960169-00-P | Phil Lindquist           |                  | 1/30/96  | Revision of Attachment 2 of previous Letter  |
| C960170-00-P | Phil Lindquist           |                  | 1/31/96  | Transmittal of Monthly Progress Report for December 1995   |
| C960171-00-O | Otto Matherny            |                  | 1/31/96  | Transformers for the Hanford Site of the LIGO Project  |
| C960172-00-D | Prof. Katherine Creath   |                  | 1/31/96  | Responses to Rai Weiss' Questions  |
| C960174-00-O | Ed Jasnow                |                  | 2/1/96   | Proposed Contract for Hanford Beam Tube Enclosure Sitework and Precast Fabrication (IFB JLT 222, LIGO-C951476-00-O)  |
| C960176-00-P |                          | 96-Q019          | 1/19/96  | Quotation for a 33 MHz Reference Source  |

| Document No  | Full Name         | ContractorDocNo   | Doc Dt  | Full Title   |
|--------------|-------------------|-------------------|---------|--|
| C960177-00-V | Richard Bagley    | V049-PL-064       | 1/19/96 | Change Order Request #11 - Washington Corner Station Beam Manifold Spool Changes                         |
| C960178-00-V | Richard Bagley    | V049-PL-065       | 1/18/96 | Critical LIGO Program Procurements   |
| C960179-00-V | Richard Bagley    | V049-MM-7         | 1/18/96 | Monthly LIGO/PSI Meeting Minutes for 18 January 1996 - CDRL 8  |
| C960180-00-D | William O. Miller |                   | 1/15/96 | Weekly Report, dated 5 January 1996  |
| C960181-00-D | William O. Miller |                   | 1/12/96 | Weekly Report, dated 12 January 1996   |
| C960182-00-D | William O. Miller |                   | 1/12/96 | Information Requested on the Prototype Mount   |
| C960183-00-V | Richard Bagley    | V049-PL-067       | 1/26/96 | Change Order Request #15 - Add An 8" Port to the Main Ion Pumps  |
| C960184-00-O | Tim Melott        | 960122-1          | 1/22/96 | Mid and End Station Redesign Based on Vacuum Equipment   |
| C960184-00-P | Phil Lindquist    |                   | 3/9/96  | LIGO Change Control Board Meeting for 11 March 1996  |
| C960185-00-B | Lance Buboltz     | CBI-CT-2.3/0032   | 1/29/96 | Request for Information (RFI) #6, Revision 1 - Supply of Soft Support for Beam Tube Valve                |
| C960186-00-P | Linda Turner      |                   | 1/31/96 | Distribution of CDRL PAR-FDCM003AA1X03, Design Configuration Control Document PDR, Volume 1, Revision 3  |
| C960187-00-O |                   | 014-03400, Rev. 0 | 1/30/96 | BTE Precast Segments   |
| C960188-00-P |                   | 96-627            | 1/29/96 | Quotation for Computer Workstation   |
| C960189-00-O |                   | F-HO-0004         | 1/18/96 | LIGO Louisiana Field Weekly Report, dated 18 January 1996  |
| C960190-00-O |                   |                   | 1/29/96 | Construction Schedule Defined By Work Group  |
| C960191-00-O | Jan Szwed         | STR/CM0004        | 1/29/96 | Revised Cash Flow Estimate for LIGO P.O. PC184279  |
| C960192-00-V | Richard Bagley    | V049-PL-060       | 1/12/96 | R.O.M. Price for Change Order Request #11 - Washington Corner Station Beam Manifold Spool Changes        |
| C960193-00-V | Richard Bagley    | V049-PL-061       | 1/12/96 | R.O.M. Price for Change Order Request #12 - Freon Cooling Systems for BTM Main Roughing & Turbo Pumps    |
| C960194-00-V | Richard Bagley    | V049-PL-062       | 1/12/96 | R.O.M. Price for Change Order Request #13 - New Requirement for BSC Internal Floor Loading               |
| C960195-00-O | Tim Melott        | 960125-0          | 1/25/96 | Transformers for Hanford Site of the LIGO Project - Corner Station Transformer                           |
| C960196-00-O |                   | F-HO-0004         | 1/26/96 | LIGO Louisiana Field Weekly Report, dated 25 January 1995  |
| C960197-00-O |                   |                   | 1/26/96 | List of Quality Control Labs   |
| C960198-00-D |                   | PP189372-75AA     | 1/30/96 | Purchase Order Confirmation for Acousto-Optic Frequency Shifter  |
| C960199-00-B | Lance Buboltz     | CBI-CT 2.3/0023   | 1/16/96 | Preliminary Dimensions of the Beam Tube Terminations   |
| C960200-00-P |                   |                   | 1/30/96 | LIGO Mission Assurance (FY96) Work Order Summary, dated 30 January 1996                                  |
| C960201-00-B | Ed Jasnow         |                   | 2/2/96  | Beam Tube Model - Fabrication and Shipping   |
| C960202-00-V | John Worden       |                   | 2/2/96  | Technical Direction Memorandum (TDM) 08 - Approval for Expenses Associated with February Review Meetings |
| C960203-00-V | John Worden       |                   | 2/2/96  | Technical Information Memorandum (TIM) 13 - Responses to Change Order Requests #15, #5, #14, and #12     |
| C960204-00-V |                   |                   | 2/2/96  | Transmittal of TDM 08 and TIM 13   |
| C960205-00-O | Otto Matherny     |                   | 2/2/96  | Notification of Award Selection for IFB JLT 221 (LIGO-C951476-00-O)                                      |
| C960206-00-O | Otto Matherny     |                   | 2/2/96  | Notification of Award Selection for Contract to IFB JLT 221 (LIGO-C951476-00-O)                          |
| C960210-00-O | Fred Asiri        |                   | 2/2/96  | Technical Direction Memorandum (TDM) 96-02 - Deletes TDM 96-01 and Serves as a Replacement               |
| C960214-00-B | Larry Jones       |                   | 2/2/96  | Technical Information Memorandum (TIM) 003 - Response to RFI #7 - C-EJ-CO Revisions                      |
| C960215-00-D | Dr. Chris Walsh   |                   | 2/5/96  | Weekly Status Report   |
| C960216-00-B | Larry Jones       |                   | 2/5/96  | Quality Plan Notes and Agenda for 13 February 1996 Review Meeting  |
| C960217-00-P | Carol Smith       |                   | 2/6/96  | Response to LIGO Statement of Work (dated 11 January 1996)   |
| C960220-00-B | Lance Buboltz     | CBI-CT 2.2/0037   | 2/2/96  | Request for Information (RFI) #8 - Gate Valve Leak Test  |
| C960221-00-B | Lance Buboltz     | CBI-CT 2.2/0037   | 2/2/96  | Request for Information (RFI) #9 - GPS Alignment Alternatives  |
| C960222-00-B | Lance Buboltz     | CBI-CT 2.2/0037   | 2/2/96  | Request for Information (RFI) #10 - Gate Valve Dimensions  |
| C960223-00-B | Larry Jones       |                   | 2/6/96  | Initial Comments to Configuration Management Plan  |
| C960224-00-B | Ed Jasnow         |                   | 2/6/96  | Change Order Request for Data Acquisition  |
| C960225-00-P | Phil Lindquist    |                   | 2/6/96  | Revised LIGO FY 1996 Acquisition Plan (Attachment 2 of 1/25/96 letter)                                   |
| C960226-00-B | Lance Buboltz     | CBI-CT-2.3/0033   | 1/31/96 | Revised Technical Review Meeting Agenda for 8 February 1996  |
| C960226-01-B | Lance Buboltz     |                   | 2/6/96  | Revised Agenda for Technical Review Meeting, 8 February 1996   |
| C960227-00-O |                   |                   | 1/31/96 | Invoice from PSI through Parsons for period through 12/31/95   |
| C960227-00-R | Albert Lazzarini  |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960227-00-R | David Shoemaker   |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960227-00-R | Peter Fritschel   |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960227-00-R | Alex Abramovici   |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960227-00-R | Irena Petrac      |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960227-00-R | Stan Whitcomb     |                   | 4/2/96  | Proposal Evaluation Report for Procurement for Nd3+ Laser Design and Fabrication                         |
| C960228-00-P |                   | 3656, Rev. 1      | 1/30/96 | Quotation for Polishing LIGO Pathfinder Test Mass Blanks from General Optics                             |
| C960228-02-P |                   | 3656, Rev. 2      | 2/1/96  | Quotation to Polish LIGO Pathfinder Test Mass Blanks from General Optics                                 |
| C960228-03-P |                   | 3656, Rev. 3      | 2/5/96  | Quotation to Polishing LIGO Pathfinder Test Mass Blanks from General Optics, Inc.                        |
| C960229-00-P |                   |                   | 1/29/96 | Quotation from Network General   |
| C960230-00-P |                   |                   | 1/26/96 | Quotation from McInfo  |
| C960231-00-P |                   | 2885              | 1/29/96 | Quotation for Computer Workstation   |

| Document No  | Full Name                | ContractorDocNo    | Doc Dt  | Full Title   |
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| C960232-00-V | David Mc Williams        | V049-PL-74         | 2/1/96  | Transmittal of Documentation   |
| C960233-00-V | David Mc Williams        | V049-1-043, Rev. 1 | 2/1/96  | Vacuum Equipment Instrument Air Requirements, Revision 1   |
| C960234-00-V | David Mc Williams        |                    | 2/1/96  | Clean Room Crane Cut Sheets  |
| C960235-00-V | David Mc Williams        | V049-1-033         | 2/1/96  | Heat Load Calculations on 80K Pump (Clean)   |
| C960236-00-V | David Mc Williams        | V049-1-037         | 2/1/96  | Steady State LN2 Requirements for 80K Pump and Two Phase Flow Regime Calculations for Supply Line  |
| C960237-00-V | David Mc Williams        | V049-1-038         | 2/1/96  | Heat Load Calculations on 80K Pump (Frosted)   |
| C960238-00-V | David Mc Williams        |                    | 2/1/96  | Data Sheet from the California Fire Marshall on the Clean Room Softwall Material   |
| C960239-00-V | David Mc Williams        |                    | 1/16/96 | LIGO 80K Cryopump - Technical Interchange Meeting  |
| C960240-00-O | Tim Melott               | 960129-0           | 1/29/96 | Minutes of Meeting Regarding Hanford BTE Slab and Fab. Change Order 1 of 29 January 1996   |
| C960241-00-P | Linda Turner             |                    | 2/2/96  | Distribution of Vacuum Equipment Instrument Air Requirements, Revision 1   |
| C960242-00-P | Linda Turner             |                    | 2/2/96  | Distribution of LN2 Consumption Calculations   |
| C960243-00-P | Linda Turner             |                    | 2/2/96  | Distribution of Heat Load Calculations on 80K Pump (Clean)   |
| C960244-00-P | Linda Turner             |                    | 2/2/96  | Distribution of Data Sheet from the California Fire Marshall on Clean Room Softwall Materials  |
| C960245-00-P | Linda Turner             | V049-1-038         | 2/2/96  | Distribution of Heat Load Calculations on 80K Pump (Frosted)   |
| C960246-00-P | Linda Turner             |                    | 2/2/96  | Distribution of Clean Room Crane Cut Sheets  |
| C960247-00-O | Mel Weingart             | 960202-0           | 2/2/96  | Engineering Change Proposal (ECP) #10, Vacuum Equipment Relocation   |
| C960248-00-B | Lance Buboltz            | CBI-CT 2.2/0037    | 2/5/96  | Purchase Order to E.H. WACHS for Equipment to Expand and Machine the Ends of the Beam Tube Assemblies  |
| C960248-B-O  | Ralph M. Parsons Company | WA-A-108 Rev. B    | 4/19/96 | Architectural, Corner Station, OSB Partial Floor Plan, Sheet 1 - Hanford   |
| C960249-00-B | Lance Buboltz            | CBI-CT 2.2/0038    | 2/5/96  | Purchase Order to Metlab for Raw Material Bake   |
| C960250-00-D | Andreas Nonnenmacher     |                    | 2/6/96  | LIGO Pathfinder Expenditures through 2 February 1996   |
| C960251-00-O | Karl Drobny              | 960129-CM-0001     | 2/5/96  | Field Construction Office Meeting Minutes for 25 January 1996  |
| C960252-00-B | Lance Buboltz            | CBI-CT 2.2/0042    | 2/19/96 | Invoice #WBS-3169 for Meetings in Pasadena   |
| C960253-00-B | Lance Buboltz            | CBI-CT 2.2/0043    | 2/19/96 | Project Status Review Meeting Minutes for 14 February 1996, CDRL 40b, DRD 19   |
| C960254-00-B | Lance Buboltz            | CBI-CT 2.2/0043    | 2/19/96 | Meeting Minutes for Technical Review of 8 February 1996  |
| C960255-00-O | Fred Asiri               |                    | 2/20/96 | Transmittal of TDM 96-03 (LIGO-C960256-00-O)   |
| C960256-00-O | Fred Asiri               |                    | 2/20/96 | Technical Direction Memorandum (TDM) 95-03   |
| C960257-00-O | Fred Asiri               |                    | 2/20/96 | Transmittal of Signed ECP #10, Rev. 2  |
| C960258-00-O | Fred Asiri               |                    | 2/21/96 | Transmittal of LIGO L960155-00-E   |
| C960263-00-P | Carol Smith              |                    | 4/4/96  | Advance Copy of CIT Change Order #2 to Existing Terms and conditions for P.O. PC184342 (LIGO-C951178-02-I)   |
| C960266-00-V | Tom Starr                | V049-I-25          | 2/7/96  | Valve Particulate Test Methods   |
| C960267-00-V | Tom Starr                | V049-PL-84         | 2/9/96  | Transmittal of Project Needs List and Memo re. Large Gate Valve Particulate Test Methods   |
| C960276-00-P | Linda Turner             |                    | 2/6/96  | Distribution of CBI's RFI #8, #9, and #10  |
| C960301-00-V | John Worden              |                    | 2/7/96  | Transmittal of RFI from CBI Regarding the Beam Tube Valves   |
| C960302-00-O | Ed Jasnow                |                    | 2/7/96  | Transmittal of Executed Contract PC181539 (LIGO-C960074-00-O), Hanford Beam Tube Enclosure Sitework and Precast Fabrication  |
| C960303-00-D | Bill Kells               |                    | 2/3/96  | Measurements and Analyses of Coatings Developed by REO   |
| C960304-00-D | Prof. Katherine Creath   |                    | 2/6/96  | CSIRO Trip Report, 12-17 January 1996  |
| C960305-00-P | Irena Petrac             |                    | 2/9/96  | JPL/LIGO Work Orders for Quality Assurance and Safety  |
| C960306-00-O | Fred Asiri               |                    | 2/7/96  | Mid/End Stations (Present Design) - Table-Top Review on 1 February 1996  |
| C960307-00-V | John Worden              |                    | 2/9/96  | Transmittal of PSI Specification V049-2-011  |
| C960308-00-P | Phil Lindquist           |                    | 2/9/96  | Figure Correction for Annual Report (December 1994 - November 1995)  |
| C960309-00-P | Phil Lindquist           |                    | 2/9/96  | Figure Correction for LIGO Project Monthly Progress Report (LIGO-M960004-00-P)   |
| C960310-00-O | Tina Lowenthal           |                    | 2/14/96 | RFP TL-229 - Surveying Support for Hanford Site  |
| C960311-00-D | Dr. Chris Walsh          |                    | 2/12/96 | Weekly Status Report through 12 February 1996  |
| C960312-00-D | Garilynn Billingsley     |                    | 2/12/96 | Technical Direction Memorandum (TDM) 004 - Shipment of Optics to NIST  |
| C960313-00-O | Mel Weingart             |                    | 2/7/96  | Support of the Hanford Fire Marshall   |
| C960316-00-D |                          | 0005724            | 1/28/96 | Invoice from Australian National University  |
| C960317-00-O | Fred Asiri               |                    | 2/12/96 | Operation Support Building (OSB) - Table-Top Review on 6 February 1996   |
| C960318-00-O | Ed Jasnow                |                    | 2/13/96 | RFP EJ-228 - Quality Assurance Testing and Reporting for the Construction of the Beam Tube Enclosure, Beam Tube Support Slab, Access Road and Associated Site Work at Hanford Site |
| C960319-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 (LIGO-C960318-00-O) for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford Site                             |
| C960320-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228  |
| C960321-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA  |
| C960322-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA  |
| C960323-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA  |
| C960324-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA  |
| C960325-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube enclosure and Support Slab at Hanford, WA  |
| C960326-00-O | Ed Jasnow                |                    | 2/13/96 | Transmittal of RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA  |
| C960327-00-O | Ed Jasnow                |                    | 2/13/96 | Change Order #1 to P.O. PC189539 (LIGO-C960074-00-O) for the Hanford BTE and Sitework and Precast Fabrication  |

| Document No  | Full Name            | ContractorDocNo    | Doc Dt  | Full Title   |
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| C960327-00-O | Tina Lowenthal       |                    | 2/13/96 | Change Order #1 to P.O. PC189539 (LIGO-C960074-00-O) for the Hanford BTE and Sitework and Precast Fabrication      |
| C960337-01-B | Lance Buboltz        |                    | 3/29/96 | Quality Assurance Manual and QAP:s for ANSI/ASQC Standard Q9001 (ISO 9000), dated 29 March 1996                    |
| C960350-02-B | Lance Buboltz        | CBI QAP 19.1, Rev. | 3/29/96 | Quality Assurance Procedure (QAP) for National Board Repairs and Alterations, Revision 2, dated 29 March 1996      |
| C960351-00-O | Charlie Martin       |                    | 2/28/96 | Review Approval for Preliminary Design Package Draft Submittal (LIGO-C951288-00-P) from Parsons                    |
| C960352-00-B | Lance Buboltz        |                    | 3/8/96  | Installation Plan, Draft - CDRL 08, DRD 02   |
| C960352-16-P | Earl Friese          |                    | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038   |
| C960352-16-P | Tina Lowenthal       |                    | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038   |
| C960353-00-B | Lance Buboltz        |                    | 3/8/96  | Acceptance Test Plan, Draft - CDRL 09, DRD 02  |
| C960354-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 01, DRD 01  |
| C960355-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 02, DRD 01  |
| C960356-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 03, DRD 01  |
| C960357-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 04, DRD 01  |
| C960358-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 05, DRD 02  |
| C960359-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 06, DRD 02  |
| C960360-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 07, DRD 02  |
| C960361-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 08, DRD 02  |
| C960362-00-P | Linda Turner         |                    | 3/11/96 | Distribution of CBI CDRL 09, DRD 02  |
| C960363-00-B | Lance Buboltz        | CBI-CT 2.2/0059    | 3/8/96  | Transmittal of CBI DRD 01 and DRD 02, Drafts (CDRLs 01, 02, 03, 04, 05, 06, 07, 08, 09)                            |
| C960364-00-O | Tim Melott           | 960311-0           | 3/11/96 | Interface Location for the Livingston Access Road and the LIGO Site Roads  |
| C960365-00-O | Fred Asiri           |                    | 3/13/96 | Interface Location for Livingston Access Roads   |
| C960366-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Design Document Revisions - Design Calculations for CDRL's 10 & 24 - CDRL 10 & 24, DRD 03                          |
| C960367-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Termination ICD - Specification ICD, BTT - CDRL 11, DRD 03   |
| C960368-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Module Length - CDRL 12, DRD 03  |
| C960369-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Pump Port Hardware - CDRL 13, DRD 03   |
| C960370-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Pump Port Hardware ICD - CDRL 14, DRD 03   |
| C960371-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Spiral Weld Quality - CDRL 15, DRD 03  |
| C960372-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Cleaning Equipment - CDRL 16, DRD 03   |
| C960373-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Cleanliness Monitoring - CDRL 17, DRD 03   |
| C960374-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Field Enclosure - CDRL 18, DRD 03  |
| C960375-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/12/96 | Vacuum Box - CDRL 19, DRD 03   |
| C960376-00-D | Andreas Nonnenmacher |                    | 2/13/96 | HDOS Status Update   |
| C960377-00-O |                      |                    | 2/14/96 | Transmittal of RFP TL-229 for Surveying Support at Hanford Site  |
| C960378-00-O | Tina Lowenthal       |                    | 2/14/96 | Transmittal of RFP TL-229 for Surveying Support at Hanford Site  |
| C960379-00-O | Tina Lowenthal       |                    | 2/14/96 | Transmittal of RFP TL-229 for Surveying Support at Hanford Site  |
| C960380-00-O | Tina Lowenthal       |                    | 2/14/96 | Transmittal of RFP TL-229 for Surveying Support at Hanford Site  |
| C960381-00-O | Tina Lowenthal       |                    | 2/14/96 | Transmittal of RFP TL-229 for Surveying Support at Hanford Site  |
| C960382-00-D | Stefanie Malkenhorst |                    | 2/13/96 | Return of Optics from Australia  |
| C960383-00-D | Ramin Lalezari       |                    | 2/14/96 | REO Status Report, dated 14 February 1996  |
| C960384-00-D | Garilynn Billingsley |                    | 2/14/96 | Closure of Questions from Metrology Review   |
| C960385-00-O | Ed Jasnow            |                    | 2/15/96 | Request for Quotation (RFQ) EJ-230 for 1,000 Baffles   |
| C960386-00-O | Ed Jasnow            |                    | 2/15/96 | RFQ EJ-230 for Quotation for Beam Tube Baffles   |
| C960387-00-O | Ed Jasnow            |                    | 2/15/96 | RFQ EJ-230 for Beam Tube Baffles   |
| C960388-00-O | Ed Jasnow            |                    | 2/15/96 | RFQ EJ-230 for Beam Tube Baffles   |
| C960389-00-O | Ed Jasnow            |                    | 2/15/96 | RFQ EJ-230 for Beam Tube Baffles   |
| C960390-00-O | Ed Jasnow            |                    | 2/15/96 | RFQ EJ-230 for Beam Tube Baffles   |
| C960391-00-O | Fred Asiri           |                    | 2/16/96 | Contractors' Meeting Minutes for 13 February 1996  |
| C960392-00-O | Ed Jasnow            |                    | 2/22/96 | RFP EJ-228 for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford, WA |
| C960393-00-D | Garilynn Billingsley |                    | 2/16/96 | Transmittal of LIGO Procedure for Handling LIGO Optics Containers  |
| C960394-00-D | Garilynn Billingsley |                    | 2/16/96 | Transmittal of LIGO Procedure for Handling LIGO Optics Containers  |
| C960395-00-V | John Worden          |                    | 4/9/96  | Technical Information Memorandum (TIM) 14  |
| C960396-00-P | Phil Lindquist       |                    | 2/19/96 | Transmittal of Monthly Progress Report for January 1996  |
| C960397-00-D | Dr. Chris Walsh      |                    | 2/19/96 | Weekly Report through 19 February 1996   |
| C960398-00-V | John Worden          |                    | 2/18/96 | Technical Information Memorandum (TIM) 15  |
| C960399-00-V | John Worden          |                    | 2/19/96 | Transmittal of TIM 15  |
| C960437-00-O | Mel Weingart         | 960213-0           | 2/13/96 | Project Status Report, dated 9 February 1996   |
| C960439-00-O | Tim Melott           | 960212-0           | 2/12/96 | Statement of Work for Quality Assurance Testing and Reporting for the BTE Slab and Fabrication Package, Revision 1 |
| C960440-00-B | Lance Buboltz        | CBI-CT 2.3/0043    | 3/5/96  | Request for Information (RFI) #16 - Fixed Support Bracket Modification   |

| Document No  | Full Name            | ContractorDocNo   | Doc Dt  | Full Title   |
|--------------|----------------------|-------------------|---------|--|
| C960441-00-B | Lance Buboltz        | CBI-CT 2.2/0057   | 3/5/96  | Transmittal of CDRL 23 - Alignment Alternative   |
| C960442-00-B | Lance Buboltz        | CBI-CT 2.2/0057   | 3/5/96  | Alignment Alternate Presentation - Item 1, CDRL 23   |
| C960443-00-D | Garilynn Billingsley |                   | 3/7/96  | Shipping Instructions and Customs Information for Optics   |
| C960444-00-B | Lance Buboltz        |                   | 3/8/96  | Schedule, Draft - CDRL 01, DRD 01  |
| C960445-00-B | Lance Buboltz        |                   | 3/8/96  | Configuration Management Plan, Draft - CDRL 02, DRD 01   |
| C960445-01-B | Lance Buboltz        | CBI-CT-2.2/0116   | 7/11/96 | Revision 1 of CDRL #2 - Configuration Management Plan  |
| C960446-00-B | Lance Buboltz        |                   | 3/8/96  | Quality Assurance Plan, Draft - CDRL 03, DRD 01  |
| C960447-00-B | Lance Buboltz        |                   | 3/8/96  | Resource Plan, Draft - CDRL 04, DRD 01   |
| C960448-00-B | Lance Buboltz        |                   | 3/8/96  | Safety Plan, Draft - CDRL 05, DRD 02   |
| C960448-A-B  | Lance Buboltz        | CBI-CT 2.2/0086   | 5/23/96 | Safety Plan, FINAL (CDRL 5, DRD 1)   |
| C960449-00-B | Lance Buboltz        |                   | 3/8/96  | Subcontract Plan, Draft. - CDRL 06, DRD 02   |
| C960450-00-B | Lance Buboltz        |                   | 3/8/96  | Fabrication Plan, Draft - CDRL 07, DRD 02  |
| C960450-01-B | Marty Tellalian      | CBI-CT 2.2/0124   | 7/24/96 | Fabrication Plan, Revision 1 (CDRL 07, DRD 02)   |
| C960451-00-V | John Worden          |                   | 4/9/96  | Technical Information Memorandum (TIM) 17  |
| C960452-00-V | John Worden          |                   | 2/18/96 | Technical Information Memorandum (TIM) 16 - VOID (out of sequence)   |
| C960454-00-O | Fred Asiri           |                   | 2/20/96 | Transmittal of LIGO-D950145-SK-O   |
| C960455-00-P | Tina Lowenthal       |                   | 2/20/96 | P.O. PC193079 with Taylor, Porter, Brooks & Phillips & Phillips, Attorneys at Law for Legal Services Regarding Tax Implications in Louisiana |
| C960457-00-D |                      |                   | 3/1/96  | Statement of Work - Metrology I and II, in support of P.O. PC184342, Change Order #3   |
| C960460-00-I | Chris Evans          |                   | 2/23/96 | Revised Response to LIGO Statement of Work, dated 14 February 1996   |
| C960461-00-D | David Reitze         |                   | 4/1/96  | Review of Proposal for KD 226 from Lightwave Electronics Corp.   |
| C960461-00-D | Bernard Whiting      |                   | 4/1/96  | Review of Proposal for KD 226 from Lightwave Electronics Corp.   |
| C960461-00-D | David Tanner         |                   | 4/1/96  | Review of Proposal for KD 226 from Lightwave Electronics Corp.   |
| C960468-00-O | Ed Jasnow            |                   | 2/27/96 | Response to Request for Information regarding Request for Quotation (RFQ EJ-230, LIGO-C960385-00-O)  |
| C960469-00-O | Ed Jasnow            |                   | 2/27/96 | Response to Request for Information regarding Request for Quotation (RFQ EJ-230, LIGO-C960385-00-O) for Beam Tube Baffles                    |
| C960470-00-O | Ed Jasnow            |                   | 2/27/96 | Response to Request for Information regarding Request for Quotation (RFQ EJ-230, LIGO-C960385-00-O) for Beam Tube Baffles                    |
| C960471-00-O | Ed Jasnow            |                   | 2/27/96 | Response to Request for Information regarding Request for Quotation (RFQ EJ-230, LIGO-C960385-00-O) for Beam Tube Baffles                    |
| C960472-00-O | Ed Jasnow            |                   | 2/27/96 | Response to Request for Information regarding Request for Quotation (RFQ EJ-230, LIGO-C960385-00-O) for Beam Tube Baffles                    |
| C960474-00-B | Larry Jones          |                   | 2/27/96 | Technical Direction Memorandum (TDM) 96-001 - Weld Speed   |
| C960476-00-P | Joseph Platnick      |                   | 2/27/96 | Return of Software and Denial of Waiver of Restocking Fee  |
| C960479-00-P | Irena Petrac         |                   | 2/28/96 | Conflict of Interest Statement for KD-226, LIGO-C951465-00-P   |
| C960481-00-O | Ed Jasnow            |                   | 2/28/96 | Request for Quotation (RFQ) EJ-230   |
| C960484-00-P | Joan Boughan         |                   | 2/29/96 | MIT Request for Authorization to Purchase Equipment  |
| C960485-00-B | Larry Jones          |                   | 2/29/96 | Technical Information Memorandum (TIM) #007 - Pump Port Hardware Interfaces  |
| C960486-00-B | Larry Jones          |                   | 2/29/96 | Documents Transmittal  |
| C960487-00-I | Irena Petrac         |                   | 3/1/96  | Transmittal of Advance Copy of Change Order #2 for P.O. PC184342   |
| C960490-00-O | Fred Asiri           |                   | 3/1/96  | The Hanford Out Buildings and Civil Design - Table Top Review of 22 February 1996  |
| C960491-00-V | Dick Curtis          | V049-PL-104       | 2/29/96 | Mechanical Room Utilities/Wall Penetrations by LIGO  |
| C960492-00-O | Fred Asiri           |                   | 3/1/96  | Transmittal of PSI Document  |
| C960493-00-O | Mel Weingart         | 960226-1          | 2/26/96 | Engineering Change Proposal (ECP) #11 - Miscellaneous Modifications Requested by TDM 96-03   |
| C960494-00-D | Dr. Chris Walsh      |                   | 3/4/96  | Weekly Report, dated 4 March 1996  |
| C960497-00-D | Garilynn Billingsley |                   | 3/5/96  | LIGO Procedure for Handling LIGO Optics Containers   |
| C960498-00-B | Larry Jones          |                   | 3/5/96  | Corrected Markup for Soft Support  |
| C960499-00-V | John Worden          |                   | 3/5/96  | Most Recent Plan for the Service Entrance  |
| C960500-00-B | Lance Buboltz        | CBI-CT 2.2/0057   | 3/5/96  | Set of Drawings for the Guided Support   |
| C960501-00-P | Irena Petrac         |                   | 3/5/96  | Transmittal of Conflict of Interest Statement  |
| C960502-00-D | Dr. Chris Walsh      |                   | 3/6/96  | Technical Review Issues  |
| C960503-00-P | Alice Lambert        | 97823/97838/97839 | 3/6/96  | Work Order Authorizations for Safety (Ben Lucas) and Quality Assurance (Bill Tyler)  |
| C960504-00-V | John Worden          | V049-PL-114       | 3/6/96  | Technical Information Memorandum (TIM) #18 - Response to Change Order Requests 12, 13, 17, and 18  |
| C960505-00-V | John Worden          |                   | 3/6/96  | Transmittal of TIM #18   |
| C960506-00-P | Alice Lambert        | 97822             | 3/6/96  | Work Order Authorization from JPL for QA (Bill Tyler)  |
| C960507-00-O | Fred Asiri           |                   | 3/6/96  | Technical Direction Memorandum (TDM) 96-04 - Revise Location of Service Entrance as Redlined on Drawing BT-S-002                             |
| C960508-00-P | Jean Siomkos         | CD-JMS-2639       | 3/6/96  | Request for Additional Contract Funding  |
| C960509-00-D | Garilynn Billingsley |                   | 3/6/96  | Attendees for HDOS Certification Review  |
| C960510-00-O | Fred Asiri           |                   | 3/6/96  | Science Related Performance Issues - Table Top Review of 5 March 1996  |
| C960511-00-D | Dr. Chris Walsh      |                   | 3/11/96 | Report by CSIRO to Certifications Review Meeting on the Pathfinder Project, 11-12 March 1996   |
| C960511-01-D | Dr. Chris Walsh      |                   | 4/22/96 | Final Report By CSIRO To LIGO  |
| C960511-02-D | Dr. Chris Walsh      |                   | 4/22/96 | Final Report by CSIRO To LIGO April 22, 1996   |



| Document No  | Full Name         | ContractorDocNo      | Doc Dt  | Full Title   |
|--------------|-------------------|----------------------|---------|--|
| C960512-00-D | Dr. Chris Walsh   |                      | 4/30/96 | CSIRO Phase Map Data   |
| C960513-00-D | Dr. Chris Walsh   |                      | 3/11/96 | Certifications Review Presentation by CSIRO  |
| C960514-00-O | Tim Melott        | 960307-0             | 3/7/96  | Permit Surveying, Inc. letter Regarding Initial Beam Tube Survey Control   |
| C960515-00-D | Johnson & Higgins | LIGO 96-1 (declar #) | 3/11/96 | Declaration of Shipment from CSIRO to Caltech  |
| C960516-00-O | Ed Jasnow         |                      | 3/12/96 | Cost-Plus-Fixed-Fee Contract between LIGO and RSI Rogers Surveying, Inc. for Surveying Support - Hanford   |
| C960517-00-O | Tina Lowenthal    |                      | 3/12/96 | Notice of Award for Surveying Support at Hanford (LIGO-C960516-00-O)   |
| C960518-00-V | John Worden       |                      | 3/12/96 | Technical Information Memorandum (TIM) #19   |
| C960519-00-V | John Worden       |                      | 3/12/96 | Transmittal of TIM 19  |
| C960520-00-V | John Worden       |                      | 3/12/96 | Technical Information Memorandum (TIM) #20   |
| C960521-00-V | John Worden       |                      | 3/12/96 | Transmittal of TIM #20   |
| C960522-00-R | Irena Petrac      |                      | 3/12/96 | Grant Notification for MSU, P.O. PC169604  |
| C960523-00-P | Ed Jasnow         |                      | 3/13/96 | Contract between LIGO and Shannon & Wilson, Inc. for Quality Assurance Testing and Reporting for the Beam Tube Enclosure (BTE) and Support Slab at Hanford |
| C960524-00-D | Chris Evans       |                      | 3/11/96 | Informal Report #3   |
| C960525-00-B |                   |                      | 3/12/96 | Termination Design, Draft - CDRL 10, DRD 03  |
| C960526-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Baffles, Installation Procedure "BFL" - CDRL 20, DRD 03  |
| C960527-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Alignment Alternate - CDRL 23, DRD 03  |
| C960528-00-O | S. J. Clark       | 00356502 (inv. #)    | 2/23/96 | Invoice for Period Ending 26 January 1996  |
| C960529-00-P | S. J. Clark       |                      | 2/23/96 | Invoices for Period Ending 26 January 1996 (Invoice #'s 00356503, 00356504, and 00349751)  |
| C960530-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Document Revisions - Revised Fabrication Sequence, FABSEQ, Revision 4 - CDRL 24-1, DRD 03   |
| C960531-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Document Revisions - Beam Tube Section Leak Testing - CDRL 24-2, DRD 03   |
| C960532-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Document Revisions - Alternative Fixed Support - CDRL 24-3, DRD 03  |
| C960533-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Document Revisions - Alternative Guided Support - CDRL 24-4, DRD 03   |
| C960534-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Document Revisions - Installation Sequence, INSTALLSEQ, Revision 4 - CDRL 24-5, DRD 03  |
| C960535-00-B | Lance Buboltz     | CBI-CT 2.2/0061      | 3/12/96 | Design Review Data Package - CDRL 26, DRD 05   |
| C960537-00-O | Mel Weingart      | 960308-0             | 3/8/96  | LIGO Contractors Meeting - Response to Action Items  |
| C960538-00-V | John Worden       |                      | 3/13/96 | Transmittal of Documentation   |
| C960539-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 24-5, DRD 03  |
| C960540-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 24-4, DRD 03  |
| C960541-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 24-3, DRD 03  |
| C960542-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 24-2, DRD 03  |
| C960543-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 24-1, DRD 03  |
| C960544-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CDRL 10 & 24, DRD 03   |
| C960545-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 23, DRD 03  |
| C960546-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 20, DRD 03  |
| C960547-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 19, DRD 03  |
| C960548-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 18, DRD 03  |
| C960549-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 16, DRD 03  |
| C960550-00-P | Linda Turner      |                      | 3/14/96 | Distribution of CBI CDRL 15, DRD 03  |
| C960551-00-P | Ed Jasnow         |                      | 3/13/96 | Notice of Award for Quality Assurance Services for the Slab and Beam Tube Enclosure (BTE) Contract at Hanford, P.O. PC195312                               |
| C960552-00-P | Irena Petrac      |                      | 3/13/96 | Overrun Concerns as Reflected in Change Order #2 to P.O. PC164701 with HDOS  |
| C960553-00-D | Bill Kells        |                      | 3/19/96 | AR Coating Test Results  |
| C960554-00-B | Lance Buboltz     |                      | 3/6/96  | Revised Agenda for Beam Tube Design Review, 27 March 1996  |
| C960555-00-B | Larry Jones       |                      | 5/1/96  | Attachment I to Contract Change Order #3   |
| C960556-00-B | Larry Jones       |                      | 3/15/96 | Technical Information Memorandum (TIM) 010 - Response to RFI #6  |
| C960557-00-B | Larry Jones       |                      | 3/15/96 | Transmittal of TIM 010 and Planned Text for Exhibit III Note   |
| C960558-00-O | Fred Asiri        |                      | 3/15/96 | Technical Direction Memorandum (TDM) 96-05   |
| C960563-00-O | Mel Weingart      | 960312-1             | 3/12/96 | Engineering Change Proposal (ECP) #13 - Revised BTE Service Entrance Segments  |
| C960565-00-P | Ed Jasnow         |                      | 3/13/96 | Error Correction to P.O. PC195312 (LIGO-C960523-00-P)  |
| C960566-00-P | Thomas Kane       |                      | 3/15/96 | Notification of Anticipated Receipt Date for RFP KD 226  |
| C960568-00-V | John Worden       |                      | 3/18/96 | Technical Direction Memorandum (TDM) 09 - Minimum Dimensions for the LA Midpoint Valve Weld Stubs  |
| C960569-00-V | John Worden       |                      | 3/18/96 | Transmittal of TDM 09  |
| C960570-00-O | Tina Lowenthal    |                      | 3/18/96 | Transmittal of Executed Contract, P.O. PC194932 (LIGO-C960516-00-O) for Survey Support at Hanford  |
| C960571-00-O | Mel Weingart      | 960318-0             | 3/15/96 | Revised Vacuum Equipment Electrical Stub-Up Locations.   |
| C960572-00-O | Tim Melott        | PP150969             | 3/15/96 | Value Engineering Change Proposal for the Modifications of the BTE Slab Submittal S013-01000-2   |
| C960573-00-V | John Worden       |                      | 3/18/96 | Technical Information Memorandum (TIM) 21 - HAM Port Locations   |
| C960574-00-V | John Worden       |                      | 3/18/96 | Transmittal of TIM 21  |
| C960575-00-O | Ed Jasnow         |                      | 3/19/96 | Proposed Contracts for Beam Tube Baffles for Review  |

| Document No  | Full Name            | ContractorDocNo    | Doc Dt  | Full Title   |
|--------------|----------------------|--------------------|---------|--|
| C960576-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 14, DRD 03  |
| C960577-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 13, DRD 03  |
| C960578-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 12, DRD 03  |
| C960579-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 11, DRD 03  |
| C960580-00-P | Linda Turner         |                    | 3/14/96 | Transmittal of CBI CDRL 10, DRD 03   |
| C960581-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 26, DRD 05  |
| C960582-00-P | Linda Turner         |                    | 3/14/96 | Distribution of CBI CDRL 17, DRD 03  |
| C960596-00-B | Lance Buboltz        | CBI-CT 2.2/0061    | 3/13/96 | Transmittal of Draft DRDs 03 and 05, CDRLs 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24-1, 24-2, 24-3, 24-4, 24-5, |
| C960597-00-V | Richard Bagley       | V049-PL-121        | 3/14/96 | Preliminary Hazards Analysis/FMEA Data   |
| C960598-00-V | Richard Bagley       | V049-PL-120        | 3/14/96 | Revised Change Order Request #16 - Change Several Removable Spool BE-3 Configurations                                    |
| C960599-00-P | Richard Wallace      |                    | 3/14/96 | Proposal for RFP KD 226 for Nd3+ Laser Design and Fabrication for LIGO   |
| C960600-00-O | Tim Melott           | 960313-1           | 3/13/96 | Fire Protection Provisions at the Corner Station for the LIGO Project  |
| C960601-00-O | Tim Melott           | 960315-4           | 3/15/96 | Value Engineering Change Proposal for the Modifications of the BTE Slab, Submittal S013-01000-2 from ACME                |
| C960602-00-O | Edith Mshila         | S013-01000-2       | 3/6/96  | Value Engineering Change Proposal - BTE Slab Redesign Cost Comparison  |
| C960603-00-V | Richard Bagley       | V049-PL-108        | 3/13/96 | CDS Terminals Tagging  |
| C960604-00-V | Richard Bagley       | CT052              | 3/14/96 | Transmittal of Instrument List and CDS Interface Diagram Drawings  |
| C960605-00-V | Richard Bagley       | V049-1-036         | 3/14/96 | Instrument List  |
| C960606-00-O | Arthur Theis         | 3064-9101          | 3/13/96 | Topographical Survey for Livingston, Final Delivery (Mylars, 3.5 diskette)   |
| C960607-00-D | Andreas Nonnenmacher |                    | 3/19/96 | HDOS Proposed Meeting Agenda   |
| C960608-00-O | Jim Curtis           |                    | 1/10/96 | Crushed Rock at Hanford  |
| C960609-00-O | Jim Curtis           |                    | 1/17/96 | Permit Fees at Hanford   |
| C960610-00-D | Andreas Nonnenmacher |                    | 3/19/96 | Response to Proposed Meeting Agenda  |
| C960611-00-O | Fred Asiri           |                    | 3/19/96 | Transmittal of Documentation for Transfer to Hanford Site  |
| C960612-00-D | Andreas Nonnenmacher |                    | 3/19/96 | Cost Summary through 15 March 1996   |
| C960614-00-O | Fred Asiri           |                    | 3/19/96 | Transmittal of LIGO-L960200-00-E to Parsons  |
| C960615-00-B | Lance Buboltz        | PC181520           | 3/14/96 | New Design for Guided Supports and Fixed Supports  |
| C960616-00-V | John Worden          |                    | 3/20/96 | Building Cranes  |
| C960617-00-B | Steve Hand           | CBI-CT 2.3/0053    | 3/18/96 | Correction to DRD 3, Item 1 - GPS Alternate Table  |
| C960618-00-V | John Worden          |                    | 3/20/96 | Technical Information Memorandum (TIM) #22   |
| C960619-00-V | John Worden          |                    | 3/20/96 | Transmittal of TIM 22  |
| C960620-00-V | John Worden          |                    | 3/21/96 | Technical Information Memorandum (TIM) #23   |
| C960621-00-V | John Worden          |                    | 3/21/96 | Transmittal of TIM #23   |
| C960622-00-V | Richard Bagley       | V049-MM-9          | 3/15/96 | Monthly LIGO/PSI Meeting Minutes for 15 March 1996   |
| C960623-00-P | Linda Turner         |                    | 3/21/96 | Distribution of PSI CDRL 8-9, LIGO-C960622-00-V  |
| C960624-00-D | Garilynn Billingsley |                    | 3/21/96 | LIGO Future Procurement Plans for Core Optics  |
| C960625-00-D | Garilynn Billingsley |                    | 3/21/96 | Transmittal of Procurement Plan for Core Optics  |
| C960628-00-V | David Mc Williams    | V049-TN-29         | 3/4/96  | Telecon of 3/4/96 with John Worden re WA Corner Station Stub-Up Plan (V049-3-124, Rev. P1)                               |
| C960629-00-P |                      |                    | 3/5/96  | Copy of Check to U.S. Department of Energy, dated 24 October 1994  |
| C960630-00-B | Lance Buboltz        | MOF File 2.3/0051  | 3/6/96  | Revised Agenda for Beam Tube Design Review, 27 March 1996  |
| C960631-00-B | Ken Wilson           |                    | 3/6/96  | Quotation Response to RFQ EJ-230 (LIGO-C960385-00-O) - Beam Tube Baffles   |
| C960632-00-P |                      | 1107071-1 (inv. #) | 3/6/96  | Invoice from Micro Trends  |
| C960633-00-O | Ray Holder           | F-HO-0004          | 3/7/96  | Field Weekly Report - Livingston, dated 7 March 1996   |
| C960634-00-O | Tim Melott           | 960307-0           | 3/7/96  | Permit Surveying, Inc. Letter Regarding Initial Beam Tube Survey Control, dated 5 March 1996                             |
| C960635-00-O | Rick Savage          |                    | 3/21/96 | Specification Sheets for Arrester Installed at Hanford Site  |
| C960636-00-P |                      | 1107311-1 (inv. #) | 3/6/96  | Invoice from Micro Trends  |
| C960637-00-P |                      | 1107359 (inv. #)   | 3/6/96  | Invoice from Micro Trends  |
| C960638-00-P |                      | 1107361 (inv. #)   | 3/6/97  | Invoice from Micro Trends  |
| C960639-00-P | Tony Elliot          |                    | 3/6/96  | Quotation Response to RFQ EJ-230 (LIGO-C960385-00-O) - Beam Tube Baffles   |
| C960640-00-O | Karl Drobny          | CM-F0002           | 3/7/96  | Field Weekly Report - Hanford  |
| C960641-00-O | Karl Drobny          |                    | 3/8/96  | Change Order #2 for P.O. PC189539 for Beam Tube Slab Re-design; Schedule for Mock-Up Activities                          |
| C960642-00-V | Dean Reade           |                    | 3/8/96  | Safety/Data Composition of Clayless Black Enamel   |
| C960643-00-V | Richard Bagley       | V049-PL-109        | 3/8/96  | Draft Agenda for Monthly Status Meeting, 14 March 1996   |
| C960644-00-B | Curt Crist           |                    | 3/7/96  | Quotation Response for RFQ EJ-230 - Beam Tube Baffles  |
| C960645-00-P |                      |                    | 3/11/96 | Quotation from Lighthouse Technology   |
| C960646-00-D | Andreas Nonnenmacher |                    | 3/22/96 | Preliminary Data Package for LIGO Pathfinder Optics Data Review on 25 March 1996   |
| C960647-00-B | Ed Jasnow            |                    | 3/22/96 | ROM Cost for Alignment Alternate #6  |
| C960648-00-D | Bob Oreb             |                    | 3/21/96 | Wyko 6000 Data Format  |

| Document No  | Full Name                   | ContractorDocNo   | Doc Dt  | Full Title  |
|--------------|-----------------------------|-------------------|---------|---|
| C960649-00-O | Ed Jasnow                   |                   | 3/22/96 | Request for Proposal (RFQ) EJ-236 for Porcelain Coating of LIGO Beam Tube Baffles   |
| C960650-00-O | Ed Jasnow                   |                   | 3/22/96 | Request for Quotation (RFQ) EJ-236 for Porcelain Coating of LIGO Beam Tube Baffles  |
| C960651-00-O | Ed Jasnow                   |                   | 3/22/96 | Request for Quotation (RFQ) EJ-236 for Porcelain Coating of LIGO Beam Tube Baffles  |
| C960652-00-O | Ed Jasnow                   |                   | 3/22/96 | Request for Quotation (RFQ) EJ-236 for the Porcelain Coating of LIGO Beam Tube Baffles  |
| C960653-00-O | Ed Jasnow                   |                   | 3/22/96 | Request for Quotation (RFQ) EJ-236 (LIGO-C960649-00-O) for the Procelain Coating of LIGO Beam Tube Baffles  |
| C960654-00-V | John Worden                 |                   | 3/22/96 | Technical Information Memorandum (TIM) #24  |
| C960655-00-V | John Worden                 |                   | 3/22/96 | Transmittal of TIM 24   |
| C960656-00-V | Richard Bagley              | CT027             | 3/20/96 | Transmittal of Piping and Installation Diagram (P&ID) Drawings, Livingston and Hanford  |
| C960658-00-O | Mel Weingart                | 960318-4          | 3/18/96 | Engineering Change Proposal (ECP) #14 - Separate Bid Package for Mid/End Station Foundation   |
| C960661-00-V | Dick Curtis                 | V049-PL-111       | 3/11/96 | PSI Design Needs -- Building & Beam Tube Interfaces   |
| C960662-00-P | Earl Friese                 |                   | 1/8/96  | Approval for P.O. to Cygnus for Computer Modeling   |
| C960663-00-P | Earl Friese                 |                   | 1/8/96  | Change Order #6 to P. O. PP157708 with Telos Corporation  |
| C960667-00-V | Richard Bagley              | V049-PL-118       | 3/14/96 | PSI Vacuum Equipment Final Design Review (FDR), 22 - 23 May 1996  |
| C960668-00-O | Paul Weickert               | W&G #92185        | 3/19/96 | Review Comments on Calculations and Details for the Beam Tube Enclosure   |
| C960672-00-O | Fred Asiri                  |                   | 3/28/96 | Transmittal of Topographical Survey of Livingston   |
| C960673-00-D | Dr. Ray Beausoleil          |                   | 4/1/96  | Review of Proposal for KD 226 from Lightwave Electronics Corporation  |
| C960674-00-D | Robert Bourgeois            |                   | 3/25/96 | LIGO Pathfinder Optics Data Review, 25 March 1996   |
| C960674-00-D | Andreas Nonnenmacher        |                   | 3/25/96 | LIGO Pathfinder Optics Data Review, 25 March 1996   |
| C960675-00-V | John Worden                 |                   | 3/29/96 | Technical Information Memorandum (TIM) #25  |
| C960676-00-B | Lance Buboltz               |                   | 2/14/96 | Project Status Review Data Package, dated 14 February 1996 (DRD 04, CDRL 26b)   |
| C960677-00-P | Ed Jasnow                   |                   | 3/29/96 | Transmittal of Contract with Shannon & Wilson for Quality Assurance Testing and Reporting for the Beam Tube Enclosure and Support Slab at Hanford |
| C960678-00-O | Fred Asiri                  |                   | 3/29/96 | Transmittal of Signed ECP #13   |
| C960679-00-O | Fred Asiri                  |                   | 3/29/96 | Transmittal of Signed ECP #14   |
| C960680-00-O | Tim Melott                  | 960328-0          | 3/28/96 | IN-PROGRESS Draft of the 12 April 1996 Hanford FDR DCCD   |
| C960681-00-D | Chris Evans                 |                   | 3/29/96 | Informal Report #4, dated 29 March 1996   |
| C960682-00-V | John Worden                 |                   | 4/1/96  | Technical Information Memorandum (TIM) 26   |
| C960683-00-V | John Worden                 |                   | 4/1/96  | Transmittal of TIM 26 to PSI  |
| C960684-00-B | Gilbert P. Beckett          | WBS-3204 (inv. #) | 3/27/96 | Milestone #2 Invoice Payment - Design Review Meeting, dated 27 March 1996   |
| C960685-00-B | Lance Buboltz               | CBI-CT 2.2/0063   | 3/27/96 | Project Status Review Data Package (CDRL 25c, DRD 04), dated 27 March 1996  |
| C960686-00-B | Lance Buboltz               | CBI-CT 2.2/0063   | 3/27/96 | Design Review Data Package (CDRL 26a, DRD 05), dated 27 March 1996  |
| C960687-00-B | Lance Buboltz               | CBI-CT 2.2/0063   | 3/27/96 | Transmittal of CDRL 25c and 26a   |
| C960688-00-V | Richard Bagley              | V049-PL-117       | 3/12/96 | Status Report #4 (CDRL 09-4), dated 12 March 1996   |
| C960689-00-P | Linda Turner                |                   | 4/1/96  | Distribution of PSI CDRL 09-4 (LIGO-C960688-00-V)   |
| C960691-00-O | Tim Melott                  | 960325-1          | 3/25/96 | Response to LIGO-L960200-00-E, dated 20 March 1996 re Facility Monitoring and Control System (FMCS)   |
| C960693-00-D | Jesper Munch                |                   | 4/1/96  | Review of Proposal for KD 226 from Lightwave Electronics Corporation  |
| C960694-00-O | Fred Asiri                  |                   | 4/4/96  | Transmittal of Senate Bill 6511   |
| C960694-00-U | Fred Asiri                  |                   | 3/20/96 | Transmittal of Senate Bill 6511 - Act Relating to Sales and Use Tax Exemptions for Materials Used in the Construction of LIGO                     |
| C960695-00-B | Larry Jones                 |                   | 4/2/96  | Technical Information Memorandum (TIM) 011 - Request for ROM for Increased Bake Temp  |
| C960696-00-O | Ed Jasnow                   |                   | 4/3/96  | Tax Exemption and Bid Price Decrease for P.O. PC189530, Hanford   |
| C960697-00-O | Mel Weingart                | 960402-1          | 4/2/96  | Project Status Report (CDRL 05, DRD 02), dated 5 April 1996   |
| C960698-00-B | Larry Jones                 |                   | 4/2/96  | Draft Comments on CBI CDRLs (1 thru 20, 23, 24-1 thru 24-5)   |
| C960698-01-B | Larry Jones                 |                   | 4/3/96  | Draft Comments on CDRLs: Wednesday's Version  |
| C960699-00-V | Richard Bagley              | CT022             | 2/29/96 | Transmittal of Specification for Ion Pumps (V049-2-004, Rev. 1)   |
| C960700-00-P | Linda Turner                |                   | 4/3/96  | Distribution of LIGO-C960697-00-O (CDRL 05, DRD 02)   |
| C960701-00-V | Richard Bagley              | V049-TN-31        | 3/21/96 | Telecon of 19 March 1996 with John Worden   |
| C960702-00-V | Richard Bagley              | V049-TN-32        | 3/22/96 | Telecon of 21 March 1996 with John Worden   |
| C960703-00-O | Karl Drobny                 |                   | 3/20/96 | Requests for Information (RFI) 13 thru 15 and 17 from ACME  |
| C960704-00-O | Karl Drobny                 | CM-F0004          | 3/21/96 | Weekly Field Report - Hanford   |
| C960705-00-O | Ray Holder                  | F-HO-0005         | 3/21/96 | Weekly Field Report - Livingston  |
| C960706-00-V | Process Systems Int'l, Inc. | V049-PL-136       | 4/1/96  | Vacuum Equipment Hazards Analysis   |
| C960707-B-U  | Lance Buboltz               | CBI-CT 2.2/0065   | 3/29/96 | Purchase Order Submittal (#168032, Rev. 0) to North American Stainless for Expansion Joint and Beam Tube Materials for Review and Approval        |
| C960708-00-B | Lance Buboltz               | MOF 2.2/0066      | 4/2/96  | Vendor Surveillance at North American Stainless (NAS) on 3/19/96 and 3/28/96  |
| C960709-00-D | Garilynn Billingsley        |                   | 4/4/96  | Invoice Question  |
| C960710-00-O | Otto Matherny               |                   | 4/4/96  | Saw Cut Stay-Clear Area   |
| C960710-01-O | Tim Melott                  | 960506-2          | 5/6/96  | Detailed Design Recommendations for Joints  |
| C960711-00-B | Lance Buboltz               | CBI-CT 2.2/0067   | 4/3/96  | Signed Technical Information Memorandum (TIM) 011   |
| C960712-00-O | Tim Melott                  | 960402-2          | 4/2/96  | Additional Vibration Loads Due to the 3 Interferometer Configuration  |

| Document No  | Full Name            | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|----------------------|------------------|---------|---|
| C960713-00-V | Richard Bagley       | V049-PL-133      | 3/27/96 | Edwards High Vacuum Pump Instruction Manuals  |
| C960714-00-P |                      | 0005724          | 3/24/96 | Invoice from the Australian National University   |
| C960715-00-V | Richard Bagley       |                  | 3/20/96 | Solicited Vacuum Gauges Bids  |
| C960716-00-P | Phil Lindquist       |                  | 4/8/96  | Transmittal of Quarterly Progress Report (December 1995 - February 1996), dated March 1996  |
| C960717-00-B | Larry Jones          |                  | 4/8/96  | Technical Direction Memorandum (TDM) 96-002 - Conditional Approval of CDRLs   |
| C960718-00-B | Larry Jones          |                  | 4/8/96  | Review Comments for Incorporation in CDRLs 1-14, 16-20, 23, 24-1 through 24-5   |
| C960719-00-B | Larry Jones          |                  | 4/8/96  | Technical Information Memorandum (TIM) 012  |
| C960720-00-D | Jean Siomkos         |                  | 4/30/96 | HDOS Phase Map Data   |
| C960721-00-D | Jean Siomkos         | CD-JMS-2663      | 4/8/96  | Gray Scale Images of the LIGO Pathfinder Optics Data Files  |
| C960722-00-O | Karl Drobny          | LTACME-F0007     | 3/25/96 | Revised Scope of Work for Proposed Change Order #2  |
| C960723-00-O | Tim Melott           | 960327-1         | 3/27/96 | Proposed Change Order #3  |
| C960724-00-O | Tim Melott           | 960404-0         | 4/4/96  | Transmittal of Change Order #2 and #3   |
| C960725-00-B | Lance Buboltz        | CBI-CT 2.3/0060  | 5/3/96  | Revised Milestone Payment Schedule  |
| C960727-00-D | Dr. Chris Walsh      | CB00218/LN051780 | 3/28/96 | Invoice for Final Scheduled Payment #3 for Cost Incurred under P.O. PC167159  |
| C960728-00-V | Richard Bagley       | V049-PL-100      | 2/28/96 | Change Order Request #12 - Freon Cooling Systems for BTD Main Roughing and Turbo Molecular Pumps                                      |
| C960729-00-V | Richard Bagley       | V049-PL-093      | 2/14/96 | Change Order Request #13 - Revised Internal Floor Loading for the BSC's   |
| C960730-00-V | Richard Bagley       | V049-PL-099      | 2/28/96 | Change Order Request #16 - Change Several Removable Spool BE-2 and BE-3 Configurations  |
| C960731-00-V | Richard Bagley       | V049-PL-105      | 3/1/96  | Change Order Request #17 - Vacuum Pump Cart Modifications   |
| C960732-00-V | Richard Bagley       | V049-PL-106      | 3/1/96  | Change Order Request #18 - Reduce Annulus Pump Speed From .31/s to .21/s  |
| C960733-00-D | Jean Siomkos         | CD-JMS-2661      | 4/3/96  | LIGO Pathfinder Metrology/Certification Data  |
| C960735-00-R | Stan Whitcomb        |                  | 4/10/96 | Request for Oral Discussion in Response to Proposal for RFP KD 226 for Nd3+ Laser Design and Fabrication                              |
| C960736-00-O |                      |                  | 4/10/96 | Refer to LIGO-C960772-00-O (C960736-00-O is an incorrect number)  |
| C960738-00-D | Chris Evans          |                  | 4/5/96  | Informal Report #5  |
| C960739-00-B | Lance Buboltz        | CBI-CT 2.3/0055  | 4/11/96 | Missing Page for ICD-BTT and Interface Control Document for the Beam Tube and the Beam Tube Slab                                      |
| C960740-00-O | Fred Asiri           |                  | 4/11/96 | Transmittal of Detector-Civil Construction (CC) ICD for Review and Comment  |
| C960741-00-D | Andreas Nonnenmacher |                  | 4/3/96  | Closure of Action Items from LIGO Pathfinder Metrology Certification Review   |
| C960742-00-B | Lance Buboltz        |                  | 4/10/96 | Delayed Response to TDM 96-002  |
| C960743-00-B | Lance Buboltz        | CBI-CT 2.2/0068  | 4/9/96  | Caltech Request for Credit - Alternate Alignment  |
| C960744-00-B | Lance Buboltz        | CBI-CT 2.2/0068  | 4/4/96  | Change Order Request COR 002 - Provide Estimate for GPS Alignment Alternative   |
| C960745-00-O | Fred Asiri           |                  | 4/11/96 | Technical Direction Memorandum (TDM) 96-06  |
| C960746-00-O | Tim Melott           | 960410-0         | 4/10/96 | Review Comments Disposition Matrix for PDR Comments and Subcontractors Meeting  |
| C960747-00-O | Tim Melott           | 960410-0         | 4/10/96 | Review Comments Disposition Matrix - On Board Reviews   |
| C960748-00-P | Linda Turner         |                  | 4/11/96 | Distribution of LIGO-C960746-00-O   |
| C960749-00-P | Linda Turner         |                  | 4/11/96 | Distribution of LIGO-C960747-00-O   |
| C960751-01-O | Ken Wilson           | PC195912         | 5/29/96 | Beam Tube Baffle - Change Order #1  |
| C960752-00-V | John Worden          |                  | 4/12/96 | Technical Information Memorandum (TIM) 27 - Authorization for Procurement of Raw Materials Prior to FDR                               |
| C960753-00-V | John Worden          |                  | 4/12/96 | Transmittal of TIM 27   |
| C960754-00-B | Larry Jones          |                  | 4/12/96 | Conditions at the Module Terminations at CBI's Arrival  |
| C960755-00-O | Karl Drobny          | CM-F007          | 4/12/96 | Weekly Field Report, Hanford  |
| C960757-00-O | Tim Melott           | 960405-0         | 4/5/96  | Livingston Geotechnical by Woodward-Clyde   |
| C960758-00-B | Larry Jones          |                  | 4/12/96 | Transmittal of Instruction Manuals for Vacuum Pumps   |
| C960759-00-O | Ron May              |                  | 4/11/96 | Revised Easement Agreement with Dixie Electric Membership Corporation for Execution   |
| C960760-00-V | David Mc Williams    | V049-TN-35       | 4/12/96 | Telecon of 4/11/96 with John Worden   |
| C960761-00-O | Yvonne Roeder        |                  | 4/12/96 | Underground Primary Cable Installation  |
| C960762-00-D | Curt Crist           | 27826            | 4/11/96 | Notes from Meeting with Allen Sibley and Bill Tyler re. Baffles   |
| C960764-00-V | Fadi Bark            |                  | 4/12/96 | Electrical Requirements for Freon Chillers, DRAFT   |
| C960765-00-B | Lance Buboltz        | CBI-CT 2.3/0056  | 4/11/96 | Draft Agenda for Project Review Meeting, 17 April 1996  |
| C960766-00-O | Joy Harrington       |                  | 4/10/96 | Request for Facility Construction Bid Package   |
| C960767-00-O | Keil Koger           | 256-50126-160    | 4/2/96  | Monthly Report (March 1996) for Rough Grading Construction, Livingston  |
| C960767-00-O | Chris Humphreys      | 256-50126-160    | 4/2/96  | Monthly Report (March 1996) for Rough Grading Construction, Livingston  |
| C960768-00-O | F. Dean Pettit       |                  | 4/10/96 | Request for Facility Construction Bid Package   |
| C960769-00-O | Paul Lydig           |                  | 4/11/96 | Request for Facility Construction Bid Package   |
| C960770-00-V | Richard Bagley       | V049-PL-138      | 4/9/96  | Electrical Requirements for the Main Turbo, Main Roughing and Auxiliary Carts As a Packaged Unit                                      |
| C960771-00-P |                      | 190294           | 4/12/96 | Quotation for Reference Source System from RF Prototype Systems   |
| C960772-00-O | Tim Melott           | 960412-0         | 4/19/96 | Bid Set Specifications for Facility Construction, Hanford - Volume II-A&B   |
| C960773-00-O | Tim Melott           | 960412-0         | 4/19/96 | Final Design Report (FDR) Set Specifications - Facility Construction, Hanford - DRAFT (Volume II - A&B)                               |
| C960774-00-O | Tim Melott           | 960412-0         | 4/19/96 | Final Design Report (FDR), Structural Calculations - Facility Construction, Hanford - DRAFT (Volume III - A1, A2, A3, A4, A5, A6, A7) |

| Document No  | Full Name              | ContractorDocNo   | Doc Dt  | Full Title   |
|--------------|------------------------|-------------------|---------|--|
| C960775-00-O | Tim Melott             | 960412-0          | 4/19/96 | Final Design Report (FDR), Civil Calculations - Facility Construction, Hanford - DRAFT (Volume III - B)  |
| C960776-00-O | Tim Melott             | 960412-0          | 4/12/96 | Final Design Report (FDR), Mechanical Calculations - Facility Construction, Hanford - DRAFT (Volume III - C1, C2, C3)                                      |
| C960777-00-O | Tim Melott             | 960412-0          | 4/12/96 | Final Design Report (FDR), Electrical Calculations - Facility Construction, Hanford - DRAFT (Volume III - D)   |
| C960778-00-O | Tim Melott             | 960412-0          | 4/19/96 | Bid Set Drawings for Facilities Construction, Hanford  |
| C960779-00-O | Tim Melott             | 960412-0          | 4/19/96 | Final Design Report (FDR) Set Drawings -Facility Construction, Hanford - DRAFT   |
| C960780-00-O | Tim Melott             |                   | 4/12/96 | Transmittal of Bid Set Drawings and Specifications.  |
| C960783-00-O | Tim Melott             | 960412-1          | 4/12/96 | Hanford Final Design Report (FDR), DRAFT - Design Configuration Control Document (DCCD), Volume 1 (CDRL 15, DRD 06)  |
| C960794-00-O | Ed Jasnow              |                   | 4/15/96 | Transmittal Letter for Invitation for Bid (IFB) EJ-239 - Facility Constructon at Hanford   |
| C960800-00-P |                        | 0304-2724         | 3/4/96  | Quotation for Ultra Clean FEP and Nylon Bags from CRP  |
| C960801-00-O | Mel Weingart           |                   | 3/4/96  | Proposed Revised Daily Report  |
| C960802-00-D |                        | 16373             | 3/1/96  | Order Acknowledgement for YAG Lasers   |
| C960803-00-D |                        |                   | 2/29/96 | Quotation for YAG Lasers from EG&G   |
| C960804-00-B | Lance Buboltz          | CBI-CT 2.2/0052   | 2/28/96 | Change Order Request COR-001 - Provide and Install Soft Supports for Beam Tube Valves  |
| C960805-00-O | Karl Drobny            | CM-F0002          | 2/29/96 | Weekly Report - Hanford  |
| C960806-00-B | Lance Buboltz          | MOF File 2.3/0047 | 2/29/96 | Draft of Design Review Agenda, 27 March 1996   |
| C960807-00-V | Stu Motew              | V049-PL-103       | 2/29/96 | Suggested Installation for Roughing Cart   |
| C960808-00-D | Chris Evans            |                   | 3/4/96  | Informal Report #2   |
| C960809-00-O | Candice Herrin         |                   | 2/28/96 | Invoice Spreadsheet for T. L. James Industrial Contractors, Inc.   |
| C960810-00-V | Dick Curtis            | V049-TN-25        | 2/28/96 | Telecon Between Dick Curtis and Tim Melott   |
| C960811-00-B | Warren A. Carpenter    |                   | 2/28/96 | Advance Copy of Acceptance Test Plan (CDRL 09) for Review  |
| C960812-00-D |                        |                   | 2/28/96 | Calibration Procedure for the RT-30  |
| C960813-00-O | Mel Weingart           |                   | 2/27/96 | Rough Estimate on the Cost of the Mid-Station Slab   |
| C960814-00-B | Lance Buboltz          | CBI-CT 2.3/0040   | 2/23/96 | Request for Information (RFI) #13 - Termination Support Foundation Dimensions  |
| C960815-00-V | Richard Bagley         | V049-MM-8         | 2/23/96 | Monthly LIGO/PSI Meeting Minutes (CDRL 8-8), 14 February 1996  |
| C960816-00-B | Lance Buboltz          | MOF File 2.3/0041 | 2/23/96 | Certificates of Compliance for Welding Gases   |
| C960817-00-P |                        |                   | 2/23/96 | Quotation for Neodymium Iron Boron Gr. 35 Rod from Jobmaster Corporation   |
| C960818-00-V | Richard Bagley         | 296013 (inv. #)   | 2/22/96 | Invoice for PSI Travel Expenses for Contractors Meeting of 12-15 February 1996   |
| C960819-00-V | Richard Bagley         | 296014 (inv. #)   | 2/22/96 | Invoice for Milestone #9E  |
| C960820-00-O | John James Blasius     |                   | 2/26/96 | New Arrangement for Construction Offices/Trailers and Laydown  |
| C960821-00-P |                        | E6392             | 2/26/96 | Quotation for Custom 721 Chassis from Hybricon Corporation   |
| C960822-00-V | Tom Starr              | V049-PL-98        | 2/29/96 | Mounting Pads for 44" Gate Valves  |
| C960823-00-O | Alan Lewis             | ETS-M-96-745      | 2/23/96 | Requested Information for Unit Costs   |
| C960824-00-P |                        | 3714              | 2/23/96 | Quotation from Tritex Solutions, Inc.  |
| C960825-00-V | Richard Bagley         | V049-PL-90        | 2/29/96 | Responses to TIM 15  |
| C960826-00-V | Richard Bagley         | V049-PL-91        | 2/29/96 | Responses to TIM 17  |
| C960827-00-B | Steve Peters           | MOF File 2.3/0046 | 2/29/96 | Draft Copy of Revision 3 to "Procedure for Obtaining a Cleanliness Assessment Sample" for Review   |
| C960828-00-D | Garilynn Billingsley   |                   | 4/16/96 | Shipping Container Instructions  |
| C960829-00-O | Mel Weingart           | 960415-0          | 4/16/96 | Additional Support Services for Phase C and ECP 15 (ECP 15 superceded by ECP 15, Revision 1, LIGO-C960972-00-O)  |
| C960831-00-O | Tina Lowenthal         |                   | 4/19/96 | P.O. PC197005 With DEMCO For Electric Power to the LIGO Site In Livingston   |
| C960833-00-O | Fred Asiri             |                   | 4/16/96 | Technical Direction Memorandum (TDM) 96-07 - ROM for Louisiana Mid-Pump Station Building   |
| C960834-00-V | Carl Marshall          |                   | 4/17/96 | Engelhard/ICC Dehumidification Systems   |
| C960835-00-V | Richard Bagley         | V049-PL-146       | 4/10/96 | Freon Water Chillers   |
| C960836-00-O | Ray Holder             | 602780 (inv. #)   | 4/17/96 | PSI Invoice, dated 5 April 1996  |
| C960837-00-O | Ara Arman              |                   | 4/16/96 | Response to Parson's Review of Livingston Geotechnical   |
| C960838-00-O | Ray Holder             | RG005             | 4/16/95 | Work Directive RG005 Covering Work for Checking 90 degree Angle Varification to ABMB   |
| C960839-00-D | Prof. Katherine Creath |                   | 3/25/96 | Meeting at HDOS - LIGO Metrology and Certification Reviews   |
| C960840-00-D | Prof. Katherine Creath |                   | 3/26/96 | LIGO-NIST Meeting 3/26/96  |
| C960841-00-O | Jim Allen              |                   | 4/16/96 | Proposed Joint Layout and Dowels Baskets for Review  |
| C960842-00-O | Karl Drobny            | LTC-F0006         | 4/16/96 | Invoice #1 from Shannon & Wilson for Period 22 March - 29 March 1996   |
| C960843-00-O | Jim Allen              | PAR-L014          | 4/9/96  | Certified Payrolls for Week Ending 31 March 1996   |
| C960844-00-O | Karl Drobny            |                   | 4/9/96  | Request for Information (RFI) PAR-001 - Pneumatic Testing of U/G Conduit   |
| C960845-00-O | Jim Allen              | S042-01310-0      | 4/16/95 | Construction Schedule from Acme Materials & Construction Co.   |
| C960846-00-O | Gary Sanders           |                   | 4/17/96 | Review Board for the LIGO Facility Final Design Review (FDR) for Hanford   |
| C960847-00-O | Rick Savage            |                   | 4/15/96 | Documents with Regard to the Lightning Protection and Grounding and Shielding Issues Discussed During Meetings at Caltech 16 February 1996                 |
| C960848-00-O | Rick Savage            |                   | 4/15/96 | Documents with Regards to the Lightning Protection and Grounding and Shielding Issues Discussed During the Meetings held at Caltech on February 16th, 1996 |
| C960849-00-O | Karl Drobny            | CM-F008           | 4/18/96 | Weekly Field Report - Hanford  |
| C960850-00-O | Ray Holder             | F-HO-0005         | 4/18/96 | Weekly Field Report - Livingston   |

| Document No  | Full Name         | ContractorDocNo    | Doc Dt  | Full Title  |
|--------------|-------------------|--------------------|---------|---|
| C960851-00-O | Paul Weickert     | 92185              | 4/17/96 | Slab/OSB Calculations   |
| C960852-00-O | Fred Asiri        |                    | 4/18/96 | Final Design Review for the LIGO Facilities at Hanford  |
| C960853-00-P | Irena Petrac      |                    | 4/18/96 | No-Cost Extension for MIT   |
| C960854-00-V | David Mc Williams | V049-PI-150        | 4/19/96 | Beam Tube Gate Valves Alignment Criteria  |
| C960855-00-O | Mel Weingart      | 960416-0           | 4/16/96 | Engineering Change Proposal (ECP) #16, Revised Grading Design, Hanford                                    |
| C960857-00-V | John Worden       | V049-PL-151        | 4/22/96 | TIM 28.   |
| C960858-00-V | David Mc Williams | V049-TN-36         | 4/18/96 | Telecon of 4/18/96 with John Worden   |
| C960859-00-D |                   | PP197075-75DJ      | 4/18/96 | Order Acknowledgement from REO for the Coating Run  |
| C960860-00-B | Lance Buboltz     | CBI-CT 2.2/0070    | 4/17/96 | Project Status Review Data Package (CDRL 25d), dated 17 April 1996  |
| C960861-00-O | Tim Melott        | 960416-1           | 4/16/96 | Adjustable Speed Drive (ASD) Installation Study   |
| C960862-00-M | T. Everhart       |                    | 4/11/96 | LIGO Review Congratulations   |
| C960863-00-V | Richard Bagley    | V049-PL-151        | 4/19/96 | BSC Prototype Vessel Fabrication Schedule - RANOR   |
| C960864-00-P | Arthur Faverio    |                    | 4/19/96 | Facsimile From MITEQ  |
| C960865-00-O | Ed Jasnow         |                    | 4/18/96 | P.O. PC197081 with West Coast Porcelain, Inc. for Coating of Baffles                                      |
| C960869-00-D | David Farrant     |                    | 4/12/96 | Facsimile From David Farrant to Bill Kells - LIGO Data  |
| C960871-00-B | Larry Jones       |                    | 4/23/96 | HA Field Install Start Date   |
| C960871-A-B  | Larry Jones       |                    | 4/23/96 | HA Field Install Start Date   |
| C960872-00-O | Mel Weingart      |                    | 4/23/96 | LIGO Cost Estimate Summary (Hanford Facilities - 2.1.F.)  |
| C960873-00-D | Chris Evans       |                    | 4/22/96 | Informal Report #6, dated 22 April 1996   |
| C960874-00-O | Ed Jasnow         |                    | 4/23/96 | Addendum No. 1 for IFB EJ-239 (LIGO-C960772-00-O) for Buildings and Infrastructure at Hanford, Washington |
| C960875-00-B | Cecil Franklin    |                    | 4/22/96 | Heat Treating Coil Material Log Sheets  |
| C960876-00-B | Larry Jones       |                    | 4/23/96 | Contract No PC181520 for LIGO Beam Tube Modules.  |
| C960878-00-O | Karl Drobny       | LTC-F0007          | 4/24/96 | Change Order and Field Work Directive Status for Acme Materials & Construction - Hanford                  |
| C960879-00-P | Jackie LaFever    | TIS/CS L96-084     | 4/24/96 | Revised Quote Letter for Valerie Beasley, P.O. PP157708   |
| C960880-00-R | Irena Petrac      |                    | 5/6/96  | Fixed-Price Contract with Lightwave Electronics Corporation for Design and Fabrication of Nd3+ Lasers     |
| C960880-A-R  | Ed Jasnow         |                    | 5/9/96  | Fixed-Price Contract with Lightwave Electronics Corporation for Design & Fabrication of Nd3+ Lasers       |
| C960881-00-O | Mel Weingart      | 960422-0           | 4/19/96 | Hanford Final Design Report, DRAFT - Volume IV-B, 3 Interferometer Estimate (CDRL 15, DRD 06)             |
| C960882-00-O | Mel Weingart      | 960422-0           | 4/19/96 | Hanford Final Design Report, DRAFT - Volume IV-A, 2 Interferometer Estimate (CDRL 15, DRD 06)             |
| C960883-00-P | Linda Turner      |                    | 4/25/96 | Distribution of FDR CDRL for Hanford  |
| C960884-00-O | Tim Melott        | 960425-0           | 4/25/96 | Dimensions of Beam Tube Supports  |
| C960885-00-O | Ray Holder        | F-HO-0005          | 4/25/96 | Weekly Field Report - Livingston  |
| C960886-00-O | Mel Weingart      | 960423-1           | 4/19/96 | Change Order #4 - Hanford, Beam Tube Enclosure (Specifications)   |
| C960887-00-O | Mel Weingart      | 950423-1           | 4/19/96 | Change Order #4 - Hanford, Beam Tube Enclosure (Drawings)   |
| C960888-00-O | Mel Weingart      | 960423-1           | 4/23/96 | Transmittal of Change Order #4 - Hanford, Beam Tube Enclosure (Specifications and Drawings)               |
| C960889-00-B | Ron Johnson       | FAX #58            | 4/25/96 | Potential Repair Procedure  |
| C960890-00-V | Richard Bagley    | V049-PL-153        | 4/25/96 | GNB 1st Article Valve Schedule  |
| C960891-00-B | Larry Jones       |                    | 4/25/96 | Large Gate Valve Needs  |
| C960892-00-V | Richard Bagley    | V049-MM-10         | 4/25/96 | LIGO/PSI Monthly Meeting Minutes and Agenda for 16 April 1996 (CDRL 8-10)                                 |
| C960893-00-P | Phil Lindquist    |                    | 4/26/96 | LIGO Project Monthly Progress Report, LIGO-M960030-00-P - NSF Award No. PHY-9210038                       |
| C960893-00-P | Earl Friese       |                    | 4/26/96 | LIGO Project Monthly Progress Report, LIGO-M960030-00-P - NSF Award No. PHY-9210038                       |
| C960894-00-O | Karl Drobny       | CM-F009            | 4/25/96 | Weekly Field Report - Hanford   |
| C960895-00-O | Kenneth Adkins    | 1155-1 (inv. #)    | 4/26/96 | Invoice for Period Ending 22 March 1996   |
| C960896-00-V | Richard Bagley    | V049-PL-144        | 4/11/96 | Project Status Report, dated 11 April 1996 (CDRL 09-5)  |
| C960897-00-D | Dr. Chris Walsh   |                    | 4/26/96 | Scale Error on Plots  |
| C960898-00-D | Dr. Chris Walsh   |                    | 4/30/96 | CSIRO Microroughness Data   |
| C960899-00-B | Paul A. LoBello   |                    | 4/26/96 | Flow-Down Requirements for CBI Contract   |
| C960900-00-B | Larry Jones       |                    | 4/26/96 | Technical Direction Memorandum (TDM) 96-003 - Draft CDRL Responses  |
| C960901-00-C | John G. Vogler    | 96-Q019A           | 4/26/96 | Revised Quotation Proposal for the LIGO 32.7 MHz Source   |
| C960902-00-O | Edith Mshila      | S013-01000, Rev. 6 | 4/26/96 | Submittal Package - Detailed Design Recommendation for Joints   |
| C960903-00-B | Lance Buboltz     | CBI-CT 2.2/0072    | 4/27/96 | Project Status Review Meeting Minutes for 17 April 1996   |
| C960904-00-D | Dr. Chris Walsh   |                    | 4/29/96 | Amended Figure  |
| C960905-00-B | Ed Jasnow         |                    | 4/29/96 | Proposed Changes to Article 4, Special Provisions, E. Economic Escalation                                 |
| C960908-00-P | Phil Lindquist    |                    | 4/30/96 | Request for Approval, Proposed Contract for Nd3+ Laser Design and Fabrication (LIGO-C960880-00-R)         |
| C960909-00-O | Karl Drobny       |                    | 4/29/96 | Correspondence Clarifying Status of Change Orders 1 - 5 with ACME - Hanford Site                          |
| C960910-00-B | Steve Peters      | MOF File 2.3/0058  | 4/24/96 | LIGO Procurement Activities for Next Several Weeks  |
| C960911-00-P |                   |                    | 4/29/96 | Quotation from California Fine Wire Company   |
| C960912-00-O | Ray Holder        |                    | 4/29/96 | Weather Status and Record for March-April 1996 - Livingston   |

| Document No  | Full Name              | ContractorDocNo    | Doc Dt  | Full Title  |
|--------------|------------------------|--------------------|---------|---|
| C960913-00-O | William Parker         |                    | 4/28/96 | Comments on LIGO Lightning Protection, Grounding, and Shielding Issues  |
| C960914-00-O | Bill Franks            |                    | 4/30/96 | Requests to be Added to List of Acceptable Manufacturers (LIGO-C960874-00-O) - Hanford Site                       |
| C960915-00-V | John Worden            | VO49-LP-66         | 5/13/96 | Technical Information Memorandum (TIM) 29 - Review of Selections from Civil Construction Bid Package from Parsons |
| C960916-00-O |                        |                    | 4/30/96 | Bid Questions for IFB EJ-239  |
| C960917-00-D | Chris Evans            |                    | 4/22/96 | Informal Report #7  |
| C960918-00-O |                        |                    | 4/30/96 | Bid Questions for IFB EJ-239  |
| C960919-00-D | Garilynn Billingsley   |                    | 5/1/96  | Hereaus   |
| C960920-00-B | Jim Exline             |                    | 5/1/96  | Rolling of Material Scheduled for 6 May 1996  |
| C960921-00-V | Richard Bagley         | V049-TN-37         | 5/1/96  | Telecon of 4/25/96 with John Worden   |
| C960922-00-V | Richard Bagley         | V049-TN-38         | 5/1/96  | Telecon of 4/30/96 with John Worden   |
| C960923-00-O | Hal Amick, PE          |                    | 5/1/96  | LIGO Hanford - Inconsistency, Vibration Isolation Schedule, WA-H-006  |
| C960924-00-P |                        |                    | 5/1/96  | Quotation from Caltex   |
| C960925-00-D |                        | 223995 (inv. #)    | 4/21/96 | Invoice Credit from Australian National University (ANU)  |
| C960926-00-B | Larry Jones            |                    | 5/1/96  | CBI-Caltech Fax #58, Potential Repair Procedure   |
| C960927-00-B | Lance Buboltz          | CBI-CT 2.3/0059    | 4/30/96 | Revised Milestone Payment Schedule  |
| C960928-00-P |                        | G9604004           | 5/3/96  | Quotation from Heraeus Amersil Inc.   |
| C960929-00-O | Ray Holder             | 050196-01          | 5/1/96  | Livingston LIGO Site Visitors   |
| C960931-00-B | Jim Exline             |                    | 5/1/96  | Schedule Change for Material Run  |
| C960932-00-P |                        |                    | 5/1/96  | Quotation from Johnson Matthey  |
| C960933-00-B | Lance Buboltz          | PC181520           | 5/8/96  | Project Status Review Meeting Agenda (Caltech/CBI) - May 16, 1996   |
| C960934-00-V | John Worden            |                    | 5/2/96  | Technical Information Memorandum (TIM) 30 - Shipment of FDR packages  |
| C960935-00-V | John Worden            |                    | 5/2/96  | Transmittal of TIM 30   |
| C960936-00-D | Fred Raab              |                    | 5/2/96  | Error in DRD Formula for Calculating the Figure of Merit for Low-Frequency Motion                                 |
| C960937-00-O | Ray Holder             | F-HO-0005          | 5/2/96  | Weekly Field Report - Livingston  |
| C960938-00-D |                        |                    | 5/2/96  | Information from Heraeus  |
| C960939-00-B | Larry Jones            |                    | 5/2/96  | Mods to Proposed Partial Payment Milestone Values   |
| C960940-00-B | Ed Jasnow              |                    | 5/2/96  | Proposed Material Escalation Text   |
| C960942-00-V | Richard Bagley         | V049-PL-110        | 3/11/96 | Vacuum Equipment Power Required at Load Centers - Corner Station  |
| C960943-00-V | Richard Bagley         | PC175730           | 3/21/96 | Change Order Request No. 19 Mode Cleaner Tube Changes   |
| C960944-00-B | Lance Buboltz          | PC181520           | 3/7/96  | Schedule Acceleration - Action Item CBI-11  |
| C960944-00-U | Linda Turner           |                    | 5/24/96 | This is a Test,,,,,hello....  |
| C960945-00-R | Tina Lowenthal         |                    | 5/3/96  | Request for Proposal (RFP) TL-241 for 40 Meter Reference Source System  |
| C960946-00-R | Tina Lowenthal         |                    | 5/3/96  | Transmittal of Request for Proposal (RFP) TL-241 for 40 Meter Reference Source System                             |
| C960947-00-R | Tina Lowenthal         |                    | 5/3/96  | Transmittal of Request for Proposal (RFP) TL-241 for 40 Meter Reference Source System                             |
| C960948-00-O |                        |                    | 6/4/96  |   |
| C960948-00-V | Tom Starr              | VO49-VMM-2         | 6/5/96  | GNB Status Meeting Minutes - 5/30/96  |
| C960949-00-P | Steve Small            |                    | 6/4/96  | Quotation - Tritex Solutions Inc.   |
| C960950-00-P | Eileen Irving          |                    | 5/6/96  | Invoice - Cableco   |
| C960951-00-P | Micro-tec West         |                    | 2/13/96 | Variable Leak Valves  |
| C960952-00-D | Scott Riles            |                    | 2/7/96  | Data and Corrective Action For Test Mass  |
| C960953-00-D | Garilynn Billingsley   |                    | 5/16/96 | TOPO File Conversion.   |
| C960953-00-D | Prof. Katherine Creath |                    | 5/16/96 | TOPO File Conversion.   |
| C960954-00-O | Karl Drobny            |                    | 2/5/96  | Minutes From the Preconstruction Meeting With Acme Materials & Construction - 1/25/96                             |
| C960955-00-O | Mel Weingart           |                    | 2/7/96  | Ligo Facilities Construction Contract Industry Briefing   |
| C960956-00-B | Lance Buboltz          | PC181520           | 2/9/96  | Revised Project Status Review Meeting Agenda - 2/14/96  |
| C960957-00-B | Steve Hand             |                    | 2/9/96  | Justification Not to Return to Reference Monuments  |
| C960958-00-B | Lance Buboltz          | CBI-CT 2.2/0076    | 5/1/96  | Comments Delay for Response to TDM 96-003   |
| C960959-00-V | John Worden            |                    | 5/3/96  | Technical Information Memorandum (TIM) #31 - Transmittal of Additional Parsons Drawings                           |
| C960960-00-V | Richard Bagley         | CT021              | 2/29/96 | Transmittal of Drawings for Electrical Conduit Stub-Up Plan   |
| C960961-00-V | Stu Motew              | V049-PL-82         | 2/9/96  | Transmittal of Dimensional Prints for Vacuum Pump Carts from Edwards High Vacuum, Inc.                            |
| C960962-00-V | Richard Bagley         | V049-1-002, Rev. 1 | 5/1/96  | LIGO Vacuum Equipment, Final Design Report - Project Management Plan, Volume 1                                    |
| C960963-00-V | Richard Bagley         | V049-1-097, Rev. 0 | 5/1/96  | LIGIO Vacuum Equipment, Final Design Report - Design, Volume 2  |
| C960964-00-V | Richard Bagley         | V049-1-097         | 5/1/96  | LIGO Vacuum Equipment, Final Design Report - Calculations, Volume 2 - Attachment 1-4                              |
| C960965-00-V | Richard Bagley         | V049-1-097         | 5/1/96  | LIGO Vacuum Equipment, Final Design Report - Specifications, Volume 2 - Attachment 5                              |
| C960966-00-V | Richard Bagley         | V049-1-099         | 5/1/96  | LIGO Vacuum Equipment, Final Design Report - Fabrication, Volume III  |
| C960967-00-V | Richard Bagley         | V049-1-100         | 5/1/96  | LIGO Vacuum Equipment, Final Design Report - Installation, Volume IV  |
| C960971-00-O | Mel Weingart           | PP150969           | 4/30/96 | Project Status Report   |

| Document No  | Full Name            | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|----------------------|------------------|---------|---|
| C960972-00-O | Mel Weingart         |                  | 5/2/96  | Additional Support for Phase C Services   |
| C960973-00-O | Tim Melott           | PP150969         | 4/29/96 | Corrected Drawing List for Change Order No.4  |
| C960974-00-V | Richard Bagley       |                  | 5/2/96  | FDR Submittal Summary - Advance Notice for Drawing Numbering  |
| C960975-00-O | Karl Drobny          | CM-F010          | 5/3/96  | Weekly Field Report - Hanford   |
| C960976-00-V | Stu Motew            | V049-PL-158      | 5/3/96  | Roughing Pump Drawings from Edwards High Vacuum   |
| C960977-00-P |                      |                  | 5/3/96  | Quotation from Caltex   |
| C960978-00-O | Ray Holder           | 050696-01        | 5/6/96  | Construction Recovery Plan  |
| C960979-00-O | Edith Mshila         |                  | 3/13/96 | Length Change for Type D and Type E Sections  |
| C960980-00-O | Ray Holder           |                  | 3/14/96 | Rough Grading Progress with Stranco   |
| C960981-00-P |                      | 60311, Rev. #1   | 3/14/96 | Quotation for Quartz Wire Standoff from Accuratus Ceramic Corporation                                     |
| C960982-00-O | Tina Lowenthal       |                  | 3/15/96 | CBD Announcement  |
| C960983-00-O | Karl Drobny          |                  | 3/15/96 | Schedule of Values and Application for Payment from ACME  |
| C960984-00-P | Diana Melton         |                  | 3/15/96 | Evaluation Agreement for Open Plan Desktop  |
| C960985-00-V | Bill Murphy          |                  | 3/15/96 | Revised Payment Schedule.   |
| C960986-00-O | Karl Drobny          | LTACME-F0005     | 3/15/96 | Contract Document Section 01310 and Response to Bidders, Question #2                                      |
| C960987-00-O | Ray Holder           | 590515           | 3/12/96 | PSI Invoice fro February 1996   |
| C960988-00-D | Chris Evans          |                  | 3/11/96 | NIST Informal Report #3   |
| C960989-00-V | Dick Curtis          | V049-PL-116      | 3/12/96 | PSI Reponse to LIGO Request of Views of Clearances Around BSC2 and BSC7 (TIM 19)                          |
| C960990-00-B | Lance Buboltz        | CBI-CT 2.3/0052  | 3/12/96 | Notification of Early Release for Purchase of the GPS Equipment for Alignment of the Beam Tube Modules    |
| C960991-00-O | Karl Drobny          | CM-F0003         | 3/14/96 | Weekly Field Report - Hanford   |
| C960992-00-O | Ray Holder           |                  | 3/15/96 | Proposal from ABMB for Culvert Check and Locating of Monuments  |
| C960993-00-V | Stu Motew            | V049-PL-122      | 3/15/96 | Main Turbo Pump Stored Energy   |
| C960994-00-D | Bernicy S. Fong      |                  | 3/13/96 | YAG Laser Data Sheets   |
| C960995-00-O | Ray Holder           | F-HO-0005        | 3/14/96 | Weekly Field Report - Livingston  |
| C960996-00-V | Richard Bagley       | V049-PL-125      | 3/19/96 | Location of Load Centers  |
| C960997-00-O | Paul Weickert        | 92185            | 3/19/96 | Beam Tube Enclosure Slab  |
| C960998-00-P | Dee Burrie           |                  | 3/18/96 | Proposed Changes to Indemnity Clause  |
| C960999-00-B | Lance Buboltz        | CBI-CT 2.3/0054  | 3/19/96 | Tube Mill Status and Tube Fabrication Questions   |
| C961000-00-V | Richard Bagley       | V049-PL-126      | 3/21/96 | Change Order Request #19 - Mode Cleaner Tube Changes  |
| C961001-00-V | Richard Bagley       | V049-PL-127      | 3/21/96 | Transmittal of Signed TDM 09 and TIM 19, 20, 21, 22 and 23  |
| C961002-00-B | Larry Jones          | PC181520         | 5/6/96  | Ligo Civil Construction, Facilities: Construction Bid Package   |
| C961003-00-V | David Mc Williams    | V049-PL-158      | 5/2/96  | Leak Checking   |
| C961005-00-B | Larry Jones          |                  | 5/7/96  | CBI Contract Change Order #4: Partial Payment Schedule  |
| C961006-00-D | Dr. Chris Walsh      |                  | 5/7/96  | CSIRO Discussion with Rai Weiss   |
| C961007-00-D | Garilynn Billingsley |                  | 5/7/96  | Discussion with Rai Weiss   |
| C961008-00-O | Otto Matherny        |                  | 5/7/96  | Notification of Award to ACME for Sitework and Fabrication of Beam Tube Enclosure - Hanford               |
| C961009-00-O | Otto Matherny        |                  | 5/7/96  | Notification of Selection of ACME for Sitework and Fabrication  |
| C961010-00-P |                      |                  | 5/7/96  | Product Information of YAG Laser Protective Screen from Rockwell laser Industries                         |
| C961011-00-B | Lance Buboltz        | CBI-CT 2.2/00077 | 5/7/96  | CBI's Response to TDM 96-003  |
| C961012-00-V | Richard Bagley       | V049-PL-161      | 5/7/96  | FDR Submittal Summary Information   |
| C961013-00-B | Larry Jones          |                  | 5/7/96  | Technical Information Memorandum (TIM) #013   |
| C961014-00-O | Tim Melott           | 960506-0         | 5/6/96  | Letter from Rex Jordan, Fire Mashall of the Hanford Fire Department Approving our Requests for Exceptions |
| C961015-00-O | Tim Melott           | 960506-1         | 5/6/96  | Mid Station at Livingston Cost Estimate (One Station)   |
| C961016-00-E | Lance Buboltz        | CBI-CT 2.3/0061  | 5/3/96  | Response to Updated Design Review   |
| C961017-00-O | Ara Arman            |                  | 5/7/96  | Consolidation Data for Livingston   |
| C961018-00-O | Fred Asiri           |                  | 5/7/96  | Transmittal of LIGO-C961017-00-O to Parsons   |
| C961019-00-V | Richard Bagley       | V049-PL-162      | 5/7/96  | Transmittal of Signed TIM 31  |
| C961021-00-O | Fred Asiri           |                  | 5/8/96  | Technical Information Memorandum (TIM) 01 - Approval of Dimensions Locating Jointsin Beam Tube Slab       |
| C961022-00-O | A. Rohay             |                  | 5/2/96  | Ambient Ground Vibration Measurements at the Livingston, Louisiana LIGO Site, PRELIMINARY DRAFT           |
| C961027-00-O | Paul Weickert        |                  | 4/25/96 | Final Design Review, Ligo Facility - Hanford, Washington  |
| C961042-00-B | Lance Buboltz        | CBI-CT 2.2/0079  | 5/8/96  | CBI Request for Information (RFI) #17 - Proposed Fixed Support Base Modifications                         |
| C961044-00-B | Ed Jasnow            | PC181520         | 5/10/96 | Liquid Nitrogen Dewars  |
| C961054-00-P | Linda Turner         |                  | 5/10/96 | Distribution of CDRL Documentation  |
| C961056-00-V | John Worden          |                  | 5/10/96 | Technical Information Memorandum (TIM) 32 - Authorization for Procurement of LN2 Tanks                    |
| C961057-00-V | John Worden          |                  | 5/10/96 | Transmittal of TIM 32   |
| C961058-00-V | Richard Bagley       | V049-PL-167      | 5/10/96 | Request for Authorization to Purchase Liquid Nitrogen (LN2) Tanks   |
| C961059-00-O | John Stewart         |                  | 2/6/96  | Decision NOT to Submit Proposal for Provision of Electric Service in Livingston                           |



| Document No  | Full Name             | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|-----------------------|------------------|---------|---|
| C961060-00-R | Ed Jasnow             |                  | 5/13/96 | Request for Approval, Revised Proposed Contract for Nd3+ Laser Design and Fabrication, Contract No. PC198201 (LIGO-C960880-A-R)   |
| C961061-00-O | Fred Asiri            |                  | 5/10/96 | Technical Direction Memorandum (TDM) 96-08 - Conditional Approval of Draft Final Design Package   |
| C961062-00-P | Lori Saal             | 29-0188          | 5/8/96  | Maintenance Renewal Qoutation for Arbotext Software   |
| C961063-00-P | National Instruments  | PP199415         | 5/8/96  | National Instruments PP199415   |
| C961064-00-D | Ken Scribner          |                  | 5/8/96  | Surface Roughness Samples   |
| C961065-00-O | Jan Szwed             |                  | 5/8/96  | Recovery of Production Schedule for LIGO Livingston Project   |
| C961066-00-O | Ray Holder            | F-HO-0005        | 5/9/96  | Weekly Field Report - Livingston  |
| C961067-00-V | David Mc Williams     | VO49-PL-165      | 5/9/96  | Vacuum Equipment Final Design Review Outline/Agenda May 22 & 23 1996  |
| C961068-00-P | Eurcinia Lister       |                  | 5/9/96  | Quotation (CalTex Plastics)   |
| C961069-01-E | William Parker        |                  | 4/10/96 | LIGO EMI Control Plan and Procedures  |
| C961070-00-R | Ed Jasnow             |                  | 5/13/96 | Notice of Award to Lightwave Electronics Corporation for Design and Fabrication of Nd3+ Lasers (LIGO-C960880-A-R)   |
| C961071-00-B | Lance Buboltz         | CBI-CT 2.3/0062  | 5/8/96  | Draft 16 May 1996 Meeting Agenda  |
| C961072-00-P | Phil Lindquist        |                  | 5/22/96 | Transmittal of LIGO Project Monthly Progress Report   |
| C961073-00-O | Karl Drobny           | LTC-F0011        | 5/9/96  | LIGO Project Hanford, Payment Request for Proposed Change Order #2, From Acme Materials & Construction, To Provide Added Electrical Installations and Pipe Crossing                           |
| C961074-00-O | Karl Drobny           |                  | 5/9/96  | Weekly Construction Activity Report: Hanford Site (May 4-10, 1996)  |
| C961075-00-O | Karl Drobny           | LTC-F0010        | 5/9/96  | LIGO Project Hanford, Payment Request for Field Work Directive #ACME-F-005 from Acme Materials & Construction, to Provide and Install Geotextile Fabric Along Arm 2                           |
| C961076-00-O | Karl Drobny           | LTC-F0009        | 5/9/96  | LIGO Project Hanford, Progress Payment Request for Field Work Directive #ACME-F-004 from Acme Materials & Construction, to Provide Labor and Equipment for Test Holes Excavation and Backfill |
| C961077-00-O | Karl Drobny           | LTC-F0008        | 5/9/96  | LIGO Project Hanford, Progress Payment Reuquest #01 from Acme materials & Construction, for Peirod through 25 April 1996  |
| C961078-00-V | Paul Hendry           | VO49-PL-169      | 5/10/96 | Status Report #6, APRIL 1996  |
| C961079-00-B | Lance Buboltz         |                  | 5/9/96  | Design Document Revisions - Welding Procedure Specifications and Qualifications (DRD 03, CDRL 24-6)   |
| C961080-00-B | Lance Buboltz         | C-EJ-CO, Rev. 4  | 5/9/96  | Design Document Revisions - Expansion Joint Specification C-EJ-CO, Revision 4 (DRD 03, CDRL 24-7)   |
| C961081-00-B | Lance Buboltz         | CBI-CT 2.2/0080  | 5/9/96  | Transmittal of CDRLS 24 - 6 & 7   |
| C961082-00-B | Marty Tellalian       | CBI-CT 2.2/0073  | 5/1/96  | Partial Payment Invoice (inv. #16037)   |
| C961083-00-O | Ray Holder            |                  | 5/10/96 | Stranco Meeting Minutes - May 7, 1996   |
| C961084-00-V | David Mc Williams     | VO49-PL-166      | 5/10/96 | Vacuum Equipment Final Design Review Agenda - May 22, 1996  |
| C961085-00-P | Eric Foy              |                  | 5/10/96 | Specification Request for T2.5-6-X65, T4-6-X65, and T9-1-X65  |
| C961086-00-O | Chris Humphreys       | 256-50126-255    | 5/1/96  | Monthly Report, APRIL 1996  |
| C961086-00-O | Keil Koger            | 256-50126-255    | 5/1/96  | Monthly Report, APRIL 1996  |
| C961087-00-B | Lance Buboltz         | CBI-CT 2.2/0077  | 5/7/96  | CBI's Response to Caltech TDM 96-003 re CDRL Submittals   |
| C961088-00-B | Lance Buboltz         | CBI-CT 2.2/0081  | 5/13/96 | Provision of Prepared Area for Site Facilities and Material and Equipment Laydown   |
| C961089-00-D | William O. Miller     |                  | 5/7/96  | Draft Work Statement for the Ligo Stack Effort  |
| C961090-00-B | Lance Buboltz         | CBI-CT 2.2/0082  | 5/13/96 | Invoice Milestone Payment   |
| C961091-00-D | Chris Evans           |                  | 5/14/96 | Informal Report #8  |
| C961092-00-P | Robert L. Hubbard     | RH510CALT        | 5/10/96 | Quotation for Sun Workstation (Western Scientific)  |
| C961095-00-B | Larry Jones           |                  | 5/23/96 | Technical Information Memorandum (TIM) 014 - Response to RFI #18  |
| C961097-00-V | Richard Bagley        | VO49-PL-170      | 5/13/96 | Signed TIM 30 and TIM 29  |
| C961098-00-B | Larry Jones           |                  | 5/14/96 | May 16 Agenda; Cleaning Water Spec  |
| C961099-00-B | Larry Jones           |                  | 5/15/96 | Project Status Review Meeting Agenda - May 16, 1996   |
| C961100-00-P | John G. Vogler        | 96-Q019A         | 5/13/96 | Proposal for the Ligo 32.7 MHz Source   |
| C961101-00-O | Jim Brummett          |                  | 6/6/96  | Bid Questions   |
| C961103-00-O | Otto Matherny         |                  | 5/13/96 | Planholder's List for Ligo EJ-239   |
| C961104-00-P | William Parker        |                  | 5/13/96 | Accrued Electromagnetic Compatibility Consulting Charges  |
| C961105-00-O |                       |                  | 5/16/96 | Addendum #2 to IFB EJ-239 for Facilities Construction - Hanford, WA   |
| C961107-00-M | Sandy Pool            | 1443624 (inv. #) | 4/25/96 | Billing for Legal Services by Perkins Coie  |
| C961108-00-O | George A. Grant, Inc. |                  | 5/14/96 | Pre-Bid Questions   |
| C961109-00-B | Steve Peters          |                  | 5/13/96 | Techalloy's Production of the Weld Wire for the Ligo Beam Tubes   |
| C961110-00-P | Irena Petrac          |                  | 5/13/96 | NIST Contract Information   |
| C961112-00-V | Richard Bagley        | VO49-PL-151      | 4/22/96 | Signed TIM 28   |
| C961113-00-P | Phil Lindquist        |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961113-00-P | Irena Petrac          |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961113-00-P | Earl Friese           |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961113-00-P | Gary Sanders          |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961113-00-P | Tina Lowenthal        |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961113-00-P | Dr. David Berley      |                  | 4/26/96 | No-Cost Extension on MIT Work on PHY-9210038  |
| C961114-00-D | John G. Vogler        | 96-Q019A         | 5/17/96 | 32.7 MHz Reference Source, Telecon 5/16/96  |
| C961115-00-O | Jim E. Curtis         | Inv. # 96-4      | 5/17/96 | Ligo Project - Contract #PP166239   |
| C961116-00-V | Paul Hendry           | VO49-PL-175      | 5/17/96 | Invoices  |

| Document No  | Full Name               | ContractorDocNo  | Doc Dt  | Full Title  |
|--------------|-------------------------|------------------|---------|---|
| C961117-00-O | John E. Steffens        |                  | 5/17/96 | Request for Bidding Documents   |
| C961119-00-V | Richard Bagley          | VO49-PL-173      | 5/15/96 | Finalized PSI Review Agenda   |
| C961120-00-O | Jim E. Curtis           | PP166239         | 5/15/96 | Office Trailer Selection  |
| C961121-00-D | Prof. Katherine Creath  |                  | 5/20/96 | Fax to Kathy Creath Regarding Core Optics Procurement Plan  |
| C961121-00-U |                         |                  | 5/20/96 |   |
| C961122-00-O | Dick Curtis             | VO49-PL-174      | 5/15/96 | PSI Comments on Parson's Construction Drawings  |
| C961123-00-O | Bob Fay                 |                  | 5/16/96 | Pre-Bid Questions   |
| C961124-00-B | Marty Tellalian         | PC181520         | 5/13/96 | Coupon Outgassing Test Data   |
| C961125-00-V | Richard Bagley          | VO49-TN-39       | 5/13/96 | Ligo Project Telecon Notes  |
| C961126-00-B | Lance Buboltz           | No. PC181520     | 4/14/96 | P.O. 96020900002 With HYPAN Precision Products for Beam Tube Expansion Joints   |
| C961127-00-O | Fred Asiri              |                  | 5/20/96 | Transmittal of PSI Input to Parsons Documentation   |
| C961128-00-E | Tony Vouris             |                  | 5/20/96 | Dimensions of the Laser Cut Sample PC   |
| C961130-00-P |                         |                  | 5/22/96 | Procurement Summary for MIT LIGO Support, Subcontract No. PP045667/Change Order No. 19                                  |
| C961131-00-V | Tom Starr               | CT043            | 5/20/96 | CT043 Cover Page  |
| C961132-00-V | Tom Starr               | VO49-8-205       | 4/19/96 | Manufacturing Process, Body Flange, Ligo  |
| C961133-00-V | Tom Starr               | VO49-8-206       | 5/20/96 | Quality Assurance Procedure Design Control  |
| C961134-00-V | Tom Starr               | VO49-8-207       | 3/5/96  | Quality Assurance Procedure Document and Data Control   |
| C961135-00-O | Fred Asiri              |                  | 5/22/96 | Extension of Bid Opening Date for IFB EJ-239 for Facilities Construction in Hanford                                     |
| C961136-00-V | Tom Starr               | VO49-8-208       | 3/5/96  | Quality Assurance Procedure Purchasing  |
| C961137-00-V | Tom Starr               | VO49-8-209       | 3/5/96  | Quality Assurance Procedure Product Identification and Traceability   |
| C961138-00-V | Tom Starr               | VO49-8-211       | 3/5/96  | Quality Assurance Procedure Inspection and Testing  |
| C961139-00-V | Tom Starr               | VO49-8-212       | 3/5/96  | Control of Inspection, Measuring, and Test Equipment  |
| C961140-00-V | Tom Starr               | VO49-8-213       | 3/5/96  | Control of a Nonconforming Product  |
| C961141-00-V | Tom Starr               | VO49-8-231       | 4/19/96 | Ligo Weld Specifications  |
| C961142-00-V | Tom Starr               | VO49-8-234       | 4/19/96 | Manufacturing Process, Wheels, Ligo   |
| C961143-00-V | Tom Starr               | VO49-8-235       | 4/19/96 | Hand Scrub Procedure  |
| C961144-00-V | Tom Starr               | VO49-8-236       | 4/19/96 | Manufacturing Process, Body Weldment, Ligo  |
| C961145-00-V | Tom Starr               | VO49-8-237       | 4/19/96 | Manufacturing Process, Pins/Axles, Ligo   |
| C961146-00-V | Tom Starr               | VO49-8-238       | 4/19/96 | Manufacturing Process, Bonnet Frame, Ligo   |
| C961147-00-V | Tom Starr               | VO49-8-239       | 4/19/96 | Manufacturing Process, Body Plates, Ligo  |
| C961148-00-V | Tom Starr               | VO49-8-240       | 4/19/96 | Manufacturing Process, Carriage, Ligo   |
| C961149-00-V | Tom Starr               | VO49-8-241       | 4/19/96 | Manufacturing Process, Bonnet Plates, Ligo  |
| C961150-00-V | Tom Starr               | VO49-8-242       | 4/19/96 | Manufacturing Process, Gate Frame, Ligo   |
| C961151-00-V | Tom Starr               | VO49-8-243       | 4/19/96 | Manufacturing Process, Gate Plate, Ligo   |
| C961152-00-V | Tom Starr               | VO49-8-244       | 4/19/96 | Manufacturing Process, Link Plate, Ligo   |
| C961153-00-V | Tom Starr               | VO49-8-245       | 4/19/96 | Assembly Process Carriage/Gate/Gate Frame Assembly  |
| C961154-00-V | Tom Starr               | VO49-8-247       | 4/19/96 | Testing, 1st Article, Ligo  |
| C961155-00-V | Tom Starr               | VO49-8-248       | 4/19/96 | UHV General Specifications  |
| C961156-00-V | Tom Starr               | VO49-8-255       | 5/3/96  | Assembly G48E   |
| C961157-00-V | Tom Starr               | VO49-8-233       | 4/19/96 | Manufacturing Process, Drive Components, Ligo   |
| C961158-00-O | Karl Drobny             |                  | 5/23/96 | Ligo Hanford Weekly Report for Period Ending May 24, 1996   |
| C961159-00-O | Howard Reading          |                  | 5/22/96 | Clarifications on Invitation for Bid EJ-239 (Ligo-C960736-00-O) for Buildings and Infrastructure at Hanford, Washington |
| C961160-00-V | Richard Bagley          | VO49-1-103       | 5/17/96 | Final Design Review Data Package - CDRL NO. 03  |
| C961161-00-B | Lance Buboltz           | PC181520         | 5/16/96 | Project Status Review Meeting Minutes for May 16, 1996  |
| C961162-00-V | Richard Bagley          | 9605009 (inv. #) | 5/23/96 | Invoice for Milestone 9H  |
| C961163-00-V | Richard Bagley          |                  | 5/23/96 | Notification of Order Placed for Liquid Nitrogen (LN2) Dewars   |
| C961164-00-P | McMaster-Carr Supp. Co. | 57012            | 5/21/96 | Quotation - Mc Master-Carr Supply Company   |
| C961165-00-O | Tim Melott              | 960524-0         | 5/24/96 | Hanford Civil Construction Bid Addendum #2 to IFB EJ-239  |
| C961166-00-V | John Worden             |                  | 5/29/96 | Technical Information Memorandum (TIM) #33  |
| C961167-00-V | John Worden             |                  | 5/28/96 | Technical Information Memorandum (TIM) #34  |
| C961168-00-V | John Worden             |                  | 5/28/96 | Transmittal of TIM 34   |
| C961169-00-V | John Worden             |                  | 5/28/96 | Sketch Showing Missing Pieces of Information for CBI  |
| C961170-00-P | William Parker          | Inv. #96-027     | 5/26/96 | Accrued Electromagnetic Compatibility Consulting Charges  |
| C961171-00-E | William Parker          |                  | 5/26/96 | Response to Comments on 2nd Draft of Ligo EMI Control Plan  |
| C961172-00-P | Stefanie Malkenhorst    |                  | 5/24/96 | Invoice - Centra Worldwide, Inc.  |
| C961173-00-B | Curt Crist              |                  | 5/23/96 | "CalTech" Stainless Baffles   |
| C961174-00-V | Paul Hendry             | VO49-PL-176      | 5/24/96 | LNz Dewar Purchase Invoice for Information  |

| Document No  | Full Name       | ContractorDocNo   | Doc Dt  | Full Title  |
|--------------|-----------------|-------------------|---------|---|
| C961176-00-O | S. J. Clark     | 00450678 (inv. #) | 5/5/96  | Fee Invoice for Period Ending 22 March 1996   |
| C961177-00-O | S. J. Clark     | 00433660-00433663 | 5/5/96  | Invoices for Period Ending 22 March 1996  |
| C961178-00-V | Richard Bagley  | 9605014 (inv. #)  | 5/28/96 | Invoice for Milestone 9C  |
| C961179-00-V | Richard Bagley  |                   | 5/29/96 | Notification of Order Placement for Stainless Steel Vessel Material   |
| C961180-00-D |                 | 0005724           | 5/19/96 | Invoice from Australian National University   |
| C961181-00-O | Tim Melott      | 960624-1          | 5/28/96 | Livingston Mid Station Estimate   |
| C961182-00-O | Tim Melott      | 960528-2          | 6/7/96  | Request For Proposal (RFP) TL 240 - Beam Tube Enclosure Installation Package for Hanford (Specifications and Drawings)  |
| C961183-00-R | Tina Lowenthal  | PC201125          | 5/31/96 | Fixed-Price Contract Between California Institute of Technology and Vectronics Microwave Corporation for Ligo 40 Meter Reference Source System  |
| C961184-00-B | Lance Buboltz   | CBI-CT 2.2/0083A  | 5/17/96 | Project Status Review Data Package (CDRL #25e)  |
| C961185-00-B | Larry Jones     |                   | 5/30/96 | Approval for CDRL #24-6 (Weld Procedures) and #24-7 (C-EJ-CO)   |
| C961186-00-B | Lance Buboltz   | CBI-CT 2.2/0085   | 5/22/96 | Mill Test Reports (CDRL #29.01)   |
| C961187-00-B | Larry Jones     | PC181520          | 5/30/96 | LIGO Civil Construction, WA Facilities: Construction Bid Package  |
| C961188-00-B | Larry Jones     |                   | 5/30/96 | LA Warehouse Article  |
| C961189-00-B | Larry Jones     | PC181520          | 5/30/96 | TDM 96-004: Conditional Approval of Draft CDRLs 01 Through 24-5   |
| C961190-00-B | Larry Jones     | PC181520          | 5/30/96 | TDM No. 96-004  |
| C961191-00-B | Lance Buboltz   | CBI-CT 2.2/0084   | 5/22/96 | Liquid Nitrogen Dewars - Caltech Memo of 10 May 1996  |
| C961192-00-D | Alex Abramovici |                   | 5/30/96 | Kick-Off Meeting.   |
| C961193-00-V | Paul Hendry     | VO49-PL-178       | 5/29/96 | Reimbursable Invoice #296015  |
| C961194-00-P | Sherri Schwartz |                   | 5/29/96 | Service Agreement with MCE Technical Services   |
| C961195-00-O | Jerry Reis      |                   | 5/29/96 | Pre-Bid Questions   |
| C961196-00-B | Steve Peters    | 953571            | 5/30/96 | Procurement Schedule  |
| C961197-00-B | Lance Buboltz   | PC181520          | 4/17/96 | Revised April 17, 1996 Project Status Review Meeting Minutes  |
| C961198-00-O | Tim Melott      | 960530-0          | 5/30/96 | Responses to Bidders' Questions Received since May 20, 1996 through May 28, 1996  |
| C961199-00-V | Richard Bagley  | CT045             | 5/30/96 | Transmittal of Engineering Drawing  |
| C961200-00-R | Irena Petrac    | PC198201          | 5/31/96 | Notice of Award for PO PC198201 for the Design and Fabrication of Nd3+ Lasers   |
| C961201-00-O | Ray Holder      |                   | 5/30/96 | Weekly Field Report - Livingston  |
| C961202-00-V | Richard Bagley  | VO49-PL-181       | 5/31/96 | Response to TIM 29  |
| C961203-00-V | Richard Bagley  | VO49-PL-180       | 5/31/96 | PSI Background Vibration  |
| C961204-00-O | Ray Holder      | Inv. #7672        | 5/30/96 | Request for Payment on Stranco's Invoice #7672  |
| C961205-00-U |                 |                   | 6/4/96  |   |
| C961206-00-R | Tina Lowenthal  |                   | 6/4/96  | Transmittal of Contract Number PC201125 (LIGO-C961183-00-R) for the 40 Meter Reference Source System.   |
| C961207-00-E | Tina Lowenthal  |                   | 6/11/96 | Request for Quotation (RFQ) TL-243 - Fabrication of Fused Silica Mirror Blanks  |
| C961208-00-V | John Worden     |                   | 5/28/96 | Technical Information Memorandum (TIM) 35 - Transmittal of Selected Parsons Re: LN2 Tank Slabs  |
| C961209-00-B | Lance Buboltz   | CBI-CT 2.2/0087   | 6/3/96  | Action Item #CBI-20, Contract Material Schedule   |
| C961210-00-B | Lance Buboltz   | CBI-CT 2.2/0088   | 6/3/96  | Action Item #CBI-15, Re-evaluate Site Laydown Area Requirements   |
| C961211-00-B | Larry Jones     | PC181520          | 6/5/96  | TIM-015, Deionized Water for Tube Cleaning  |
| C961212-00-B | Lance Buboltz   | CBI-CT 2.2/0089   | 5/29/96 | Project Status Review Meeting Minutes for 26 May 1996 (DRD 19, CDRL 40d)  |
| C961213-00-B | Larry Jones     | PC181520          | 6/5/96  | Technical Information Memorandum 15   |
| C961214-00-O | Ed Jasnow       |                   | 6/5/96  | Deadline for Receipt of Questions and Requests for IFB EJ-239 for Facilities Construction in Hanford  |
| C961215-00-V | John Worden     |                   | 6/7/96  | Technical Direction Memorandum (TDM) #10 - Conditional Approval of CDRL 03, Final Design  |
| C961216-00-O | Karl Drobny     |                   | 5/29/96 | Field Work Directive  |
| C961217-00-O | Karl Drobny     |                   | 5/28/96 | Meeting Minutes from Contractor(Acme) and Construction Manager Site Meeting (Meeting 4) - 5/23/96   |
| C961218-00-O | Jim Allen       | PC189539          | 5/13/96 | Change Order #3   |
| C961219-00-O | Karl Drobny     | PC195312          | 5/22/96 | Ligo Project, Hanford, Washington. Clarification of Charges for a Four(4) Hour Call Out for a Certified Quality Assurance Technician.   |
| C961220-00-O | Karl Drobny     |                   | 6/3/96  | Meeting Minutes for Contractor(Acme) and Construction Manager Site Meeting (Meeting 5) - 6/30/96  |
| C961221-00-O | Karl Drobny     |                   | 6/4/96  | LIGO Project Hanford, Progress Payment Request Number 2 From Acme Materials and Construction, For Period 4/26/96 - 5/25/96.   |
| C961222-00-O | Jim Allen       |                   | 6/4/96  | Application for Payment for Work Through May 28, 1996.  |
| C961223-00-O | Karl Drobny     | LTC-F0016         | 6/4/96  | Payment Request for Field Work Directive #ACME-F-006 From Acme Materials to Provide Labor, Material and Equipment Necessary for the Repair of the Existing Temporary Water Line from the Well to the Pond |
| C961224-00-O | Jim Allen       | PAR-L036          | 6/4/96  | Application for Payment for Work Through 28 May 1996  |
| C961225-00-O | Jim Allen       | PC189539          | 6/4/96  | Postponement of Bituminous Surface Treatment, BST   |
| C961226-00-O | Jim Allen       |                   | 5/31/96 | Repair of Slab Edge (Request for Information #036)  |
| C961227-00-O | Jim Allen       |                   | 5/28/96 | Repair of Shrinkage Cracks (Request for Information #034)   |
| C961228-00-O | Jim Allen       |                   | 5/28/96 | Crack at a Doweled Contraction Joint (Request for Information #035)   |
| C961229-00-O | Jim Allen       | PC189539          | 6/3/96  | CBI Office Parking Lot and Lay-Down Area  |
| C961230-00-O | Jim Allen       | PC189539          | 6/3/96  | Certified Payrolls  |
| C961231-00-O | Karl Drobny     |                   | 6/3/96  | Field Work Directive  |
| C961232-00-O | Karl Drobny     |                   | 5/31/96 | Ligo Project, Hanford, Washington. Submittal of Precast Beam Tube Enclosure Production and Delivery To Site Schedule.   |

| Document No  | Full Name            | ContractorDocNo   | Doc Dt  | Full Title  |
|--------------|----------------------|-------------------|---------|---|
| C961236-00-O | Karl Drobny          | ACME-F-010        | 6/5/96  | Field Work Directive to ACME  |
| C961237-00-O | Jim Allen            |                   | 4/19/96 | Request for Information (RFI) #22 from ACME   |
| C961238-00-O | Karl Drobny          |                   | 6/7/96  | Site Meeting Minutes for 3 June 1996 with ACME  |
| C961239-00-O | Karl Drobny          | RSI-006           | 6/6/96  | Field Work Directive for Rogers Surveying, Inc.   |
| C961240-00-O | K. Donnelson         |                   | 5/23/96 | DOE's Well Water Test Results by Groundwater Sample Field Record  |
| C961241-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation.   |
| C961242-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation.   |
| C961243-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation.   |
| C961244-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation  |
| C961245-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation.   |
| C961246-00-O | Tina Lowenthal       |                   | 6/12/96 | Request for Proposal (RFP) No. TL-240 for Beam Tube Enclosure Installation.   |
| C961247-00-F | Mark Coles           |                   | 6/10/96 | Your Request for Electrical Usage and Cost Information for the LIGO Observatories   |
| C961248-00-D | Alex Abramovici      |                   | 6/11/96 | Kick-Off Meeting Agenda.  |
| C961249-00-D | Garilynn Billingsley |                   | 6/11/96 | Advance Copies of Material Specifications.  |
| C961250-00-B | Larry Jones          |                   | 6/12/96 | Baffle Issues, RFI #3   |
| C961251-00-D | Garilynn Billingsley |                   | 6/11/96 | Advance Copies of Material Specifications.  |
| C961252-00-D | Garilynn Billingsley |                   | 6/11/96 | Advance Copies of Material Specifications.  |
| C961253-00-D | Garilynn Billingsley |                   | 6/11/96 | Advance Copies of Material Specifications.  |
| C961254-00-V | Stu Motew            | CT028             | 4/17/96 | Transmittal of Vacuum Equipment Drawings  |
| C961255-00-D | Garilynn Billingsley |                   | 6/11/96 | LIGO Future Procurement Plans for Core Optics.  |
| C961256-00-D | Garilynn Billingsley |                   | 6/11/96 | LIGO Future Procurement Plans for Core Optics.  |
| C961257-00-B | Lance Buboltz        | CBI-CT 2.2/0093   | 6/7/96  | Request for Information (RFI) - #19 and #20   |
| C961258-00-O | Karl Drobny          | LTACME-F0017      | 6/11/96 | Minutes for Meeting Between Parsons and Acme on 6 June 1996   |
| C961259-00-O | Jim Allen            | PAR-L045          | 6/6/96  | Concrete Products Production and Delivery Schedule  |
| C961260-00-O | Gary Wagner          | RSI-001           | 5/30/96 | Computed Station and Offset Data from As-Built Survey of Construction Joint Layout on the Southwest Leg - Hanford                       |
| C961261-00-O | Karl Drobny          | LTC-F0021         | 6/11/96 | Payment Request from Shannon & Wilson, Inc. for Additional Cost to the Previous Invoice of Field Work Directive #SW-F001, Invoice #1404 |
| C961262-00-O | Karl Drobny          | LTC-F0020         | 6/11/96 | Payment Request from Shannon & Wilson for Field Work Directive #SW-F0002, Invoice #1405   |
| C961263-00-O | Karl Drobny          | LTC-F0019         | 6/11/96 | Invoice #3 (invoice #1409), Submitted by Shannon & Wilson, for Period 28 April 1996 through 24 May 1996                                 |
| C961264-00-O | Karl Drobny          | LTC-F0018         | 6/10/96 | Payment Request from Shannon & Wilson, Inc. for Field Work Directive #RSI-004, Which is Submitted by Rogers Surveying, Inc.             |
| C961265-00-V | Richard Bagley       | 96060005 (inv. #) | 6/10/96 | Invoice for Milestone #9D   |
| C961266-00-V | Richard Bagley       | 96060003 (inv. #) | 6/10/96 | Invoice for Milestone 7 and 8   |
| C961267-00-V | John Worden          |                   | 6/13/96 | Technical Information Memorandum (TIM) #36  |
| C961268-00-V | John Worden          |                   | 6/13/96 | Transmittal of TIM 36   |
| C961269-00-R | Tina Lowenthal       |                   | 5/31/96 | Notice of Award for 40 Meter Reference Source System, P.O. PC201125 to Vectronics Microwave Corporation                                 |
| C961270-00-B | Larry Jones          |                   | 6/13/96 | Proposed Changes to VE Deliverables for the Beam Tube Contractor  |
| C961272-00-V | Richard Bagley       | V049-PL-146       | 4/10/96 | Freon Water Chillers Electrical Requirements  |
| C961273-00-B | Larry Jones          |                   | 6/13/96 | Pump Cart Issues, RFI #11   |
| C961274-00-B | Marty Tellalian      | CBI-CT 2.2/0095   | 6/12/96 | CBI Proposal to Investigate Options to Allow a Higher Bake Temperature  |
| C961275-00-V | Richard Bagley       |                   | 6/13/96 | Monthly Status Report, MAY 1996 (CDRL 09-7)   |
| C961276-00-V | Richard Bagley       |                   | 5/10/96 | Monthly Status Report, APRIL 1996 (CDRL 09-6)   |
| C961277-00-V | Stu Motew            | CT047             | 6/13/96 | Transmittal of Drawings from Edwards High Vacuum International  |
| C961278-00-D | Robbie Vogt          |                   | 6/18/96 | Transmittal of Drawings   |
| C961279-00-B | Lance Buboltz        | CBI-CT 2.2/0094   | 6/11/96 | LIGO Site and Fabrication Offices, Address and Phone Lists  |
| C961280-00-B | Lance Buboltz        | CBI-CT 2.2/0096   | 6/13/96 | Mill Test Reports - CDRL #29.02   |
| C961282-00-B | Lance Buboltz        |                   | 6/17/96 | Revised Agenda for Project Status Review Meeting on 19 June 1996  |
| C961283-00-D | Rick Savage          |                   | 7/1/96  | Kickoff Meeting for Contract with Lightwave Electronics   |
| C961284-00-O | Ty Howe              |                   | 6/6/96  | Pre-Bid Questions   |
| C961285-00-D | Garilynn Billingsley |                   | 6/18/96 | Polishing Specification, Scratches and Point Defects.   |
| C961287-00-D | William O. Miller    |                   | 6/17/96 | BSC Draft Proposal  |
| C961288-00-O | Tim Melott           |                   | 6/19/96 | Low Humidity at Livingston  |
| C961289-00-O | Timothy Lewis        |                   | 6/18/96 | Bid Proposal Request  |
| C961290-00-P | Sherri Schwartz      |                   | 5/29/96 | Service Agreement for Personnel Support at Hanford Site   |
| C961291-00-P | Monica Sorcelli      |                   | 6/13/96 | Quotation - Nor-Cal   |
| C961292-00-P | Edward W. Trieste    | 2634/ET           | 6/13/96 | Quotation - Optics For Research   |
| C961293-00-V | David Mc Williams    | VO49-PL-187       | 6/13/96 | BSC Annulus Piping II   |
| C961294-00-P | Ramin Lalezari       |                   | 6/10/96 | Quotation - Research Electro-Optics, Inc.   |
| C961295-00-B | Curt Crist           | PP195911          | 6/10/96 | Description of Proposed Contract Changes for PO PP195911  |

| Document No  | Full Name              | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|------------------------|-----------------|---------|---|
| C961296-00-B | Curt Crist             | PP195911        | 6/13/96 | Description of Proposed Contract Changes for PO PP195911  |
| C961297-00-V | Tom Starr              | VO49-PL-183     | 6/10/96 | GNB Shock Test Schedule   |
| C961298-00-V | Tom Starr              | VO49-PL-185     | 6/11/96 | GNB Schedule  |
| C961299-00-P | Jim Swindells          |                 | 6/11/96 | Quotation - U.S. Equipment Co., Inc.  |
| C961300-00-P | Jon Colson             |                 | 6/11/96 | Quotation - Altair Gases and Equipment, Inc.  |
| C961301-00-P | Monica Sorcelli        |                 | 6/11/96 | Quotation - Nor-Cal Products, Inc.  |
| C961302-00-B | Lance Buboltz          | PC181520        | 6/12/96 | Project Status Review Meeting Agenda - 6/19/96  |
| C961303-00-O | Ara Arman              |                 | 6/13/96 | Recommended Architects With Scientific Facilities Experience  |
| C961304-00-O | Ray Holder             |                 | 6/13/96 | Weekly Field Report - Livingston  |
| C961305-00-V | David Mc Williams      | PL186           | 6/13/96 | BSC Annulus Piping  |
| C961306-00-O | Karl Drobny            |                 | 6/6/96  | Weekly Construction Activity Report - Hanford   |
| C961307-00-O | Curt Crist             |                 | 6/7/96  | Caltech/Ligo Baffles  |
| C961308-00-O | Curt Crist             |                 | 6/7/96  | Caltech/Ligo Baffles  |
| C961313-00-O | Steven Palmrose        |                 | 6/7/96  | Bid Questions   |
| C961314-00-O | Karl Drobny            |                 | 6/13/96 | Weekly Construction Activity Report: Hanford Site   |
| C961315-00-O | Otto Matherny          |                 | 6/7/96  | Invoice   |
| C961316-00-P | Steve Small            |                 | 6/17/96 | Quotation - Tritex Solutions, Inc.  |
| C961317-00-P | Richard Matthews       |                 | 6/17/96 | Quotation for Sun   |
| C961318-00-O | Fred Asiri             |                 | 6/21/96 | Transmittal of Documentation  |
| C961319-00-P | Phil Lindquist         |                 | 7/8/96  | Transmittal of LIGO Project Quarterly Report  |
| C961320-00-D | Prof. Katherine Creath |                 | 6/17/96 | Consultant Invoice for Katherine Creath   |
| C961321-00-V | Richard Bagley         | VO49-TN-39      | 6/19/96 | LIGO Project Telecon Notes  |
| C961322-00-O | Karl Drobny            | LTC-F0022       | 6/19/96 | Payment Request (Invoice #961621) for Field Work Directive #RSI-F007, Which is Submitted by Rogers Surveying, Inc.                                |
| C961323-00-O | Karl Drobny            | ACME-F-001      | 3/7/96  | Field Work Directive  |
| C961324-00-O | Karl Drobny            | ACME-F-003      | 3/28/96 | Field Work Directive  |
| C961325-00-O | Karl Drobny            | ACME-F-004      | 4/16/96 | Field Work Directive  |
| C961326-00-O | Karl Drobny            | ACME-F-005      | 4/16/96 | Field Work Directive  |
| C961327-00-O | Karl Drobny            | ACME-F-006      | 4/24/96 | Field Work Directive  |
| C961328-00-O | Karl Drobny            | ACME-F007       | 6/1/96  | Field Work Directive  |
| C961329-00-O | Karl Drobny            | ACME-F-009      | 5/29/96 | Field Work Directive  |
| C961330-00-O | Karl Drobny            | ACME-F-008      | 5/29/96 | Field Work Directive  |
| C961331-00-P | Ed Jasnow              |                 | 6/13/96 | P.O. PC201985 with J. R. Orr for Review of and Participation in the LIGO Safety Program   |
| C961332-00-O | Karl Drobny            | ACME-F-010      | 6/5/96  | Field Work Directive  |
| C961333-00-O | Karl Drobny            | ACME-F-011      | 6/17/96 | Field Work Directive  |
| C961334-00-O | Karl Drobny            | ACME-F-012      | 6/17/96 | Field Work Directive  |
| C961335-00-O | Karl Drobny            | ACME-F-013      | 6/17/96 | Field Work Directive  |
| C961336-00-O | C. Henry               |                 | 6/20/96 | Minutes of Construction Progress Meeting - 6/18/96  |
| C961337-00-B | Lance Buboltz          | PC181520        | 6/19/96 | Project Status Review Data Package - CDRL #25f  |
| C961338-00-B | Lance Buboltz          | PC181520        | 6/21/96 | Invoice Milestone Payment   |
| C961339-00-O | Tim Melott             | 960621-1        | 6/21/96 | Livingston Beam Tube Installation Final Design Review (FDR) Specifications  |
| C961340-00-O | Tim Melott             | 960621-1        | 6/21/96 | Livingston Beam Tube Enclosure Final Design Review (FDR) - Specifications and Drawings  |
| C961341-00-O | Tim Melott             | PM-960621       | 6/21/96 | Weekly Report   |
| C961342-00-C | Denise Gothard         |                 | 6/21/96 | Evaluation Agreement L-1486   |
| C961343-00-O | Karl Drobny            |                 | 6/20/96 | Weekly Construction Activity Report: Hanford Site   |
| C961344-00-O | C. Henry               |                 | 6/20/96 | Field Weekly Construction Report for W/E 6/19/96  |
| C961345-00-B | Ken Wilson             | PP195912        | 6/20/96 | Beam Tube Baffles - Schedule Update   |
| C961346-00-O | Tim Melott             |                 | 5/20/96 | Bid Questions.  |
| C961347-00-P | Tina Lowenthal         |                 | 5/15/96 | Advance Copy for Request for Approval, Change Order No. 3 to Contract No. PP184342 With the National Institute of Standards and Technology (NIST) |
| C961348-00-P |                        | 224842 (inv. #) | 6/16/96 | Invoice from CSIRO  |
| C961349-00-O | Tim Melott             |                 | 5/17/96 | Weekly Report.  |
| C961350-00-O | Jamie A. Lennick       |                 | 4/3/96  | Regarding Invitation for Bid Package  |
| C961351-00-O | Tim Melott             | 960612-0        | 6/12/96 | Project Status Report, dated 7 June 1996 (CDRL 05, DRD 02)  |
| C961352-00-V | Tom Starr              | VO49-PL-188     | 6/20/96 | LIGO - RGA Testing  |
| C961353-00-O | Karl Drobny            | LTACME-F0016    | 5/31/96 | Submittal of Precast Beam Tube Enclosure Production and Delivery to Site Schedule   |
| C961355-00-B | Lance Buboltz          | TDM 96-004      | 6/5/96  | Response to Caltech TDM 96-004 Conditional Approval of Draft CDRLs 01 to 24-5 - LIGO C961189-00-B   |
| C961356-00-B | Larry Jones            |                 | 6/20/96 | Outline of Acceptance Test Procedure.   |
| C961357-00-B | Lance Buboltz          |                 | 5/14/96 | DRD #9, CDRL #30-A - Coupon Outgassing Test Data.   |

| Document No  | Full Name          | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|--------------------|-----------------|---------|--|
| C961358-00-V | Richard Bagley     | V049-PL-129     | 3/25/96 | Fabrication of HAM Vessel 1st Article.   |
| C961359-00-V | Richard Bagley     |                 | 5/2/96  | Parson's Mechanical Drawing for Review.  |
| C961360-00-V | David Mc Williams  | V049-PL-131     | 3/26/96 | Input Data for Vibration Mold.   |
| C961361-00-O | Robert Seghetti    |                 | 3/25/96 | Drawings Schedule for Concrete Readiness.  |
| C961362-00-O | S. Smart           |                 | 4/25/96 | LIGO Access Road Project Schedule.   |
| C961364-00-P | Karen Sandberg     |                 | 4/30/96 | TELOS Information Systems - Change Orders/Modifications to NSF-Approved Subcontracts.  |
| C961365-00-M | Karen Sandberg     |                 | 4/30/96 | Capital Industries Subcontract - Meyer Tool Subcontract.   |
| C961366-00-M | Karen Sandberg     |                 | 5/17/96 | West Coast Porcelain, Inc. - Subcontract for Baffle Coating.   |
| C961368-00-B | Steve Peters       | PC181520        | 5/30/96 | Procurement Schedule   |
| C961369-00-D | Irena Petrac       |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961369-00-D | Albert Lazzarini   |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961369-00-D | David Shoemaker    |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961369-00-D | Stan Whitcomb      |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961369-00-D | Peter Fritschel    |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961369-00-D | Alex Abramovici    |                 | 4/29/96 | Caltech Discreet Proposal Evaluation Report - Procurement for Nd3+ Laser Design and Fabrication.   |
| C961370-00-B | Larry Jones        |                 | 6/11/96 | Additional Beam Tube Contract Expenditures.  |
| C961371-00-B | Lance Buboltz      |                 | 6/5/96  | Signed TIM 013 and TIM 014.  |
| C961372-00-B | Lance Buboltz      | CBI-CT.2.2/0101 | 6/25/96 | Invoice Milestone Payment - CBI  |
| C961373-00-B | Gilbert P. Beckett | WBC-3261        | 6/21/96 | Invoice Milestone Payment - CBI  |
| C961374-00-B | Gilbert P. Beckett | WBC-3262        | 6/24/96 | Invoice Milestone Payment - CBI  |
| C961375-00-P | J. R. Orr          |                 | 6/12/96 | Consulting Rates.  |
| C961376-00-O | Ed Jasnow          |                 | 6/27/96 | Request for NSF Approval for Proposed Contract for Facilities Construction, Hanford (IFB EJ-239, LIGO-C960736-00-O)  |
| C961377-00-O | Karl Drobny        | RSI-008         | 6/21/96 | Field Work Directive for Roger's Surveying   |
| C961378-00-O | Karl Drobny        | LTC-F0024       | 6/24/96 | Payment Request for Field Work Directive #RSI-F005 (Invoice #961544), Which Is Submitted by Rogers Surveying, Inc. for Spot Verifying the Top of Concrete Elevation Along the Northwest Arm Beam Tube Slab |
| C961379-00-O | Karl Drobny        | LTC-F0023       | 6/24/96 | Payment Request for Field Work Directive #RSI-F0006 (Invoice #961582), Which Is Submitted by Rogers Surveying, Inc. For Verifying the Location of the Service Entrances Along the Southwest Arm            |
| C961380-00-O | Karl Drobny        |                 | 6/18/96 | Minutes of Meeting Between ACME and Parsons, 18 June 1996  |
| C961381-00-O | Karl Drobny        | SW F003         | 6/13/96 | Field Work Directive for Shannon & Wilson  |
| C961382-00-O | Karl Drobny        | ACME-F-013      | 6/17/96 | Field Work Directive for ACME  |
| C961383-00-D | William O. Miller  |                 | 6/26/96 | Transmittal of Viewgraphs  |
| C961383-00-O | Karl Drobny        | LTACME-F0020    | 6/17/96 | Submitted Cost Proposal for Field Work Directive #ACME-F-0013, For Grinding to a Smooth Finish the Anchor Slabs Along the Southwest and the Northwest Arm  |
| C961385-00-O | Gary Wagner        | RSI-007         | 6/17/96 | Surveying Data Field Notes   |
| C961387-00-B | Marty Tellalian    | CBI-CT 2.2/0099 | 6/24/96 | Drawings Associated with the Module Lengths (CDRL 12, DRD 03) - Revised in Accordance with TDM 96-003  |
| C961388-00-O | Curt Crist         | PP195911        | 4/3/96  | Sales Order  |
| C961389-00-B | A.R. Libby         | PC181520        | 2/28/96 | CBI Request for Information(RFI) No.16 - Fixed Support Bracket Modification  |
| C961390-00-B | Lance Buboltz      | CBI-CT 2.2/0100 | 6/24/96 | Change Order Request (COR) 003 - Provide Priced Proposal for Provision of 208 Volt Power for Pump Port Interface   |
| C961391-00-B | Marty Tellalian    | PC181520        | 2/20/96 | CBI Request for Information(RFI) No. 12 - Beam Tube Guided Support Configuration   |
| C961392-00-O | Joseph Levernier   |                 | 6/18/96 | Proposal Submittal for IFB EJ-239  |
| C961393-00-D | Bryan Loucks       |                 | 4/2/96  | Sketch for Proposed Method for Improving Stability of the Interferometer at NIST   |
| C961394-00-O | Fred Asiri         |                 | 6/28/96 | Technical Direction Memorandum (TDM) 96-09   |
| C961395-00-O | Fred Asiri         |                 | 6/28/96 | Transmittal of TDM 96-09   |
| C961396-00-B | Lance Buboltz      | CBI-CT 2.2/0064 | 3/27/96 | Invoice Milestone Payment #3   |
| C961397-00-B | Lance Buboltz      | CBI-CT 2.2/0104 | 6/26/96 | Transmittal of Request for Information (RFI) #20   |
| C961398-00-B | Marty Tellalian    | 2.3/0093        | 6/7/96  | CBI Request for Information (RFI) 20 - Expansion Joint Cleaning and Leak Testing Sequence  |
| C961399-00-B | Lance Buboltz      | CBI-CT 2.2/0103 | 6/26/96 | Project Status Review Meeting Minutes for 19 June 1996 (CDRL 40e, DRD 19)  |
| C961400-00-V | Tom Starr          | V049-PL-195     | 7/1/96  | GNB Status   |
| C961401-00-B | Lance Buboltz      | CBI-CT 2.2/0102 | 6/28/96 | Request for Proposal (RFP) #TL-240   |
| C961402-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Package - Livingston Civil Construction Final Design Review Specifications, Volume I-A (CDRL 17, DRD 06)  |
| C961403-00-I | Phil Lindquist     |                 | 7/2/96  | Request for Approval, Modification Number 4 to Contract With the National Institute of Standards and Technology (NIST) P.O. PC184342   |
| C961404-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Final Design Review Specifications, Volume I-B (CDRL 17, DRD 06)  |
| C961405-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-1 (CDRL 17, DRD 06)  |
| C961406-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-2  |
| C961407-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-3 (CDRL 17, DRD 06)  |
| C961408-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-4 (CDRL 17, DRD 06)  |
| C961409-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-5 (CDRL 17, DRD 06)  |
| C961410-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Structural Calculations, Volume II-A-6 (CDRL 17, DRD 06)  |
| C961411-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Civil Calculations, Volume II-B (CDRL 17, DRD 06)   |
| C961412-00-O | Tim Melott         | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Mechanical Calculations, Volume II-C-1 (CDRL 17, DRD 06)  |

| Document No  | Full Name              | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|------------------------|-----------------|---------|---|
| C961413-00-O | Tim Melott             | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Mechanical Calculations, Volume II-C-2 (CDRL 17, DRD 06)   |
| C961414-00-O | Tim Melott             | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Mechanical Calculations, Volume II-C-3 (CDRL 17, DRD 06)   |
| C961415-00-O | Tim Melott             | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Electrical Calculations, Volume II-D (CDRL 17, DRD 06)   |
| C961416-00-O | Tim Melott             | 960621-2        | 6/21/96 | Final Design Set Package - Livingston Civil Construction Final Design Review Drawings (CDRL 17, DRD 06)   |
| C961417-00-O | Tina Lowenthal         |                 | 7/3/96  | Amendment Number 1 to Request for Proposal (RFP) Number TL-240 for Beam Tube Enclosure Installation, Questions and Answers.   |
| C961419-00-O | Lance Buboltz          | PC181520        | 6/19/96 | Draft Meeting Notes for Project Status Review of June 19,1996   |
| C961420-00-V | Tom Starr              | VO49-PL-191     | 6/26/96 | 48" Gate Valve Dimensions   |
| C961421-00-B | Marty Tellalian        | PC181520        | 6/7/96  | Expansion Joint Cleaning and Leak Testing Sequence  |
| C961422-00-V | Tom Starr              | VO49-PL-191     | 6/26/96 | GNB Shock Test Trip Report  |
| C961423-00-V | Tom Starr              | VO49-PL-190     | 6/26/96 | GNB Meeting Minutes   |
| C961424-00-V | Richard Bagley         | CT048           | 7/1/96  | Transmittal of Engineering Drawings   |
| C961425-00-O | Jim Pardue             | RFP-TL-240      | 6/24/96 | Bid Questions   |
| C961426-00-P | Mike Khan              | 1309867 - 1     | 6/24/96 | Quotation - Micro Trends  |
| C961427-00-V | Richard Bagley         | VO49-TN-41      | 6/25/96 | Telecon Notes of 6/20/96 with John Worden   |
| C961428-00-B | Lance Buboltz          | CBI-CT 2.2/0103 | 6/26/96 | Project Status Review Meeting Minutes for 19 June 1996  |
| C961429-00-B | Lance Buboltz          | CBI-CT 2.2/0109 | 7/2/96  | Value Engineer Proposal VEP-003 - Revised Design for Fixed Support Bases  |
| C961430-00-B | Lance Buboltz          | CBI-CT 2.2/0110 | 7/2/96  | Nonconformance Report #1 (CDRL 42a, DRD 21)   |
| C961431-00-O | Karl Drobny            | LTC-F0029       | 7/1/96  | Payment Request for Field Work Directive #ACME-F-011 From Acme Materials & Construction, to Provide Labor, Material and Equipment Necessary to Add Excavation for Installing the Duct Banks in the Cut Areas from the Mid and End S |
| C961432-00-O | Karl Drobny            | LTC-F0025       | 7/1/96  | Progress Payment #3 from Acme Materials & Construction for Period 26 May 1996 through 28 June 1996  |
| C961433-00-O | Karl Drobny            | LTC-F0026       | 7/1/96  | Payment Request #2 for Change Order #2, from Acme Materials & Construction, To Provide Added Electrical Installations and Pipe Crossing   |
| C961434-00-O | Karl Drobny            | LTC-F0028       | 7/1/96  | Payment Request for Field Work Directive #ACME-F-010 from Acme Materials & Construction to Provide Labor, Material and Equipment Necessary for Splicing the Cut Power Cable for the Well #2 Pump                                    |
| C961435-00-O | Karl Drobny            | LTC-F0030       | 7/1/96  | Payment Request for Field Work Directive #ACME-F-012 from Acme Materials & Construction to Provide Labor, Material and Equipment to Install Pull Boxes and Conduits   |
| C961436-00-O | Karl Drobny            | LTC-F0027       | 7/1/96  | Payment Request for Field Work Directive #ACME-F-009 from Acme Materials & Construction, to Provide Labor, Material and Equipment Necessary for Preparing the Temporary Office and Storage Area for CBI                             |
| C961437-00-O | Jim Allen              | RFI #34         | 6/26/96 | Request for Information (RFI) #034  |
| C961438-00-O | Jim Allen              | PAR-L055        | 6/26/96 | Certified Payrolls  |
| C961439-00-B | Larry Jones            |                 | 7/9/96  | Technical Information Memorandum (TIM) 17 - Response to RFI #10, #18  |
| C961439-A-B  | Larry Jones            |                 | 7/19/96 | Technical Information Memorandum (TIM) 017A - Response to RFI #10, #18: Gate Valve Weights, Dimensions; Soft Support Design   |
| C961440-00-O | Tina Lowenthal         |                 | 7/10/96 | Amendment #2 to RFP TL-240 for Beam Tube Enclosure Installation - Questions and Answers and Extension to Deadline   |
| C961441-00-O | John J. Desmond        |                 | 7/3/96  | Architectural Review for Livingston   |
| C961442-00-O | John J. Desmond        | 453 (inv. #)    | 7/3/96  | Invoice for Architectural Consultation  |
| C961443-00-O | Mel Weingart           | 960703-1        | 7/3/96  | Earthwork Quantity Spreadsheet Comparison   |
| C961446-00-O | Dave Kappers           |                 | 12/8/95 | Hanford Beam Tube Enclosure Pre-Bid Questions   |
| C961447-00-D | Garilynn Billingsley   |                 | 5/16/96 | TOPO File Conversion.   |
| C961447-00-D | Prof. Katherine Creath |                 | 5/16/96 | TOPO File Conversion.   |
| C961449-00-D | QFPI                   | PP184187-75SE   | 7/8/96  | Test Report for Foam Pack   |
| C961450-00-V | Tom Starr              | VO49-PL-197     | 7/3/96  | GNB Status/Plans  |
| C961451-00-B | Don Roberts            |                 | 7/4/96  | LIGO Bakeout Contract   |
| C961452-00-O | Mel Weingart           | PP150969        | 7/3/96  | Project Status Report (CDRL 05, DRD 02)   |
| C961453-00-B | Lance Buboltz          | PC181520        | 7/8/96  | Project Status Review Meeting Agenda - July 15-16, 1996   |
| C961454-00-P | Norcal                 |                 | 6/27/96 | Quotation - Nor-Cal Products  |
| C961456-00-F | S. Smart               |                 | 6/27/96 | Economic Development Zone Report  |
| C961457-00-P | Otto Matherny          |                 | 6/27/96 | Levernier Construction Inc. Reference Verifications and Comments  |
| C961458-00-V | Richard Bagley         | VO49-TN-42      | 6/27/96 | Telecon of 6/27/96 with John Worden   |
| C961459-00-P | Western Scientific     |                 | 6/25/96 | Quotation - Fileserver  |
| C961460-00-O | C. Henry               |                 | 6/28/96 | Field Weekly Construction Report for Weekending 6/26/96   |
| C961461-00-B | Lance Buboltz          | CBI-CT-2.2/0102 | 6/27/96 | Request for Proposal (RFP) No. TL-240   |
| C961462-00-O | Karl Drobny            |                 | 6/27/96 | Weekly Construction Activity Report: Hanford Site   |
| C961463-A-P  | Richard Matthews       | ELS-22973-A     | 6/27/96 | Sales Quotation - Sun   |
| C961463-B-P  | Richard Matthews       | ELS-22973-B     | 6/27/96 | Sales Quotation - Sun   |
| C961466-00-O | Karl Drobny            | LTC-F0031       | 7/9/96  | Partial Payment Request for Change Order #3 from Acme Materials & Construction, To Provide Labor, Material and Equipment Necessary to Modify the Single Type "C" Beam Tube Enclosure Form and to Produce Additional Modules of V    |
| C961467-00-O | Bill Franks            |                 | 6/28/96 | Debriefing for Siebe Regarding Facility Monitoring and Control System (FMCS) Component for IFB EJ-239 - Hanford   |
| C961468-00-B | CBI                    | CBI-CT-2.2/0105 | 6/28/96 | Coupon Outgassing Test Data (DRD#9, CDRL#30-B)  |
| C961469-00-O | C. Henry               |                 | 6/28/96 | Minutes of Construction Progress Meeting - June 25, 1996  |
| C961470-00-O | Karl Drobny            |                 | 5/16/96 | Weekly Construction Activity Report: Hanford Site   |
| C961471-00-F | William Joubert        |                 | 7/3/96  |   |
| C961472-00-V | Tom Starr              | VO49-PL-197     | 7/3/96  | GNB Status/Plans  |
| C961473-00-O | Karl Drobny            |                 | 7/3/96  | Weekly Construction Activity Report: Hanford Site   |

| Document No  | Full Name              | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|------------------------|-----------------|---------|---|
| C961474-00-D | A. Rohay               |                 | 7/3/96  | Low-Frequency Differential Motion Analysis  |
| C961475-00-O | C. Henry               |                 | 7/2/96  | Livingston Fill Material Quantities   |
| C961476-00-D | William O. Miller      |                 | 7/9/96  | Final Draft for Proposed Contract Modifications for PO PC185630   |
| C961477-00-O | Dorothy Lloyd          |                 | 6/12/96 | Checks/Monies for Requests for IFB EJ-239, Facilities Construction for Hanford  |
| C961478-00-O | Otto Matherny          |                 | 7/2/96  | Richland Airport Office and Warehouse Layout  |
| C961479-00-O |                        | 8008083301      | 7/1/96  | Invoice for Electrical Services at Hanford from Dixie Electric  |
| C961480-00-V | Tom Starr              | VO49-PL-196     | 7/1/96  | Telecon Minutes Between GNB and PSI   |
| C961481-00-O | Karl Drobny            |                 | 7/1/96  | Meeting Minutes   |
| C961482-00-V | Stu Motew              |                 | 6/28/96 | Trip Report, Main Turbo Acceptance Tests  |
| C961483-00-O | Mel Weingart           | PP150969        | 7/2/96  | Responses to Bidder Questions   |
| C961484-00-O | Bret Kawashima         | AR-960711-0     | 7/12/96 | Record of Telephone Conversation (ROTC) with John Desmond (John Desmond & Associates) re LIGO LA Architectural Review |
| C961485-00-O | Mel Weingart           | 960712-0        | 7/12/96 | Transmittal of RTC #AR-960711-0 re LIGO LA Architectural Review   |
| C961487-00-P |                        |                 | 6/12/96 | Comments on the Committee for the April 9-11, 1996 NSF Review of LIGO.  |
| C961488-00-B | Marty Tellalian        |                 | 6/28/96 | Design Document Revisions, Support and Vacuum Stiffener Details (CDRL 24-8, DRD 03)                                   |
| C961489-00-B | Marty Tellalian        |                 | 6/28/96 | Design Document Revisions, Alternative Guided Support (CDRL 24-4, DRD 03)   |
| C961490-00-B | Marty Tellalian        |                 | 6/28/96 | Design Document Revisions, Alternative Fixed Support (CDRL 24-3, DRD 03)  |
| C961491-00-B | Marty Tellalian        |                 | 6/28/96 | Design Document Revisions, Termination Support (CDRL 10, DRD 03)  |
| C961492-00-B | Marty Tellalian        | CBI-CT 2.2/0106 | 6/28/96 | Submittal of CDRLS 10, 24-3, 24-4, 24-8   |
| C961498-00-B | Lance Buboltz          | CBI-CT 2.2/0113 | 7/10/96 | Change Order Request (COR) 004 - Proposal for Provision of Deionized Water per Requirements of TIM-015                |
| C961499-00-B |                        | 6565            | 6/30/96 | Certificate of Insurance for CBI Services, Inc.   |
| C961500-00-P | Richard Matthews       | ELS--23680-A    | 7/8/96  | Sales Quotation - Sun   |
| C961501-00-P | John Palumbi           |                 | 7/8/96  | Bid Responses - Dynasil Corp.   |
| C961502-00-O | S. Smart               |                 | 7/8/96  | Economic Development Zone Report  |
| C961503-00-P | Fred Asiri             |                 | 7/16/96 | Request for Payment of Invoice to John J. Desmond & Associates  |
| C961504-00-O | C. Henry               |                 | 7/8/96  | Berm Fill Material Handling Data - Livingston Rough Grading   |
| C961505-00-V | Klaus Kleinschmidt     | VO49-PL-200     | 7/3/96  | Gate Valve Vibration Tests at GNB-24Jun96   |
| C961506-00-O | C. Henry               |                 | 7/5/96  | Field Weekly Construction Report for Weekending 7/3/96  |
| C961507-00-V | Tom Starr              | VO49-PL-198     | 7/8/96  | GNB Status  |
| C961508-00-O | C. Henry               |                 | 7/5/96  | Minutes of Construction Progress Meeting on 7-3-96  |
| C961509-00-O | Bernard M. Levernier   |                 | 7/9/96  | Pre-Bid Questions for RFP No. TL-240  |
| C961510-00-O | Paul G. Levernier      |                 | 7/9/96  | Pre-Bid Questions for RFP No. TL-240  |
| C961511-00-B | Lance Buboltz          |                 | 7/9/96  | Provision of Pump Cart Power  |
| C961512-00-P | Robert L. Hubbard      | RH709CALT       | 7/9/96  | Quotation from Western Scientific for 8mm Tape Autoloader Backup System with Server Software                          |
| C961513-00-P | Richard Matthews       | ELS--23861-A    | 7/9/96  | Sales Quotation - Sun   |
| C961514-00-O | Joel C. McCormick      |                 | 7/8/96  | Bid for LIGO Buildings and Infrastructure Construction  |
| C961515-00-P | Richard Matthews       | ELS--22973-B    | 7/9/96  | Sales Quotation - Sun   |
| C961516-00-O | Dedra Fourmaux         |                 | 7/9/96  | Rough Draft for LIGO Brochure for LIGO Briefing Conference  |
| C961517-00-O | Karl Drobny            |                 | 7/10/96 | Acme Progress, Change Order, and Field Work Directive Progress and Invoice Status Overview                            |
| C961518-00-O | Mel Weingart           |                 | 7/10/96 | Beam Tube Enclosure Installation Bidder Questions   |
| C961519-00-D | Prof. Katherine Creath |                 | 7/16/96 | Meeting Minutes from 12 July 1996   |
| C961520-00-D | Prof. Katherine Creath |                 | 7/16/96 | Notes re CSIRO and HDOS   |
| C961521-00-O | C. Henry               |                 | 7/11/96 | Rough Grading Fill Material Quantities  |
| C961522-00-V | Andy Lampenfeld        | VO49-PL-204     | 7/11/96 | GNB Valve Modifications   |
| C961523-00-O | C. Henry               | PC184279        | 7/3/96  | Change Order #6 and #7  |
| C961524-00-O | C. Henry               |                 | 7/5/96  | Field Weekly Construction Report for Weekending 7/3/96  |
| C961525-00-O | C. Henry               |                 | 7/3/96  | Letter Regarding Unsuitable Material at LIGO, Livingston  |
| C961526-00-O | C. Henry               |                 | 7/7/96  | Rough Grading Schedule  |
| C961527-00-O | John James Blasius     |                 | 7/11/96 | Earthwork Quantity Comparison - Livingston  |
| C961528-00-O | Karl Drobny            |                 | 7/11/96 | Weekly Construction Activity Report: Hanford Site   |
| C961529-00-B | Warren A. Carpenter    |                 | 7/11/96 | Coupon Chamber Surface Area - LIGO Beam Tube Modules  |
| C961530-00-O | Michael Johnson        |                 | 7/12/96 | LIGO Pre-Construction Meeting   |
| C961531-00-O | Dedra Fourmaux         |                 | 7/12/96 | Final Draft of the LIGO Brochure  |
| C961532-00-V | Richard Bagley         | VO49-PL-208     | 7/12/96 | Agenda for LIGO Vacuum Equipment Monthly Status Meeting   |
| C961533-00-O | C. Henry               |                 | 7/12/96 | Minutes of Weekly Construction Progress Meeting Held on 7/9/96 - Livingston   |
| C961534-00-O | C. Henry               |                 | 7/12/96 | Rough Grading - Field Weekly Construction Report for Weekending 7/10/96   |
| C961535-00-V | Richard Bagley         | TN-43           | 7/12/96 | Telecon of 7/10/96 with John Worden   |
| C961536-00-A | USA Flex, Inc.         | Inv.#14973721   | 7/12/96 | Invoice - USA Flex, Inc.  |



| Document No  | Full Name            | ContractorDocNo   | Doc Dt  | Full Title   |
|--------------|----------------------|-------------------|---------|--|
| C961537-00-B | R. Vincent           |                   | 7/2/96  | Capital Industries - Baffles   |
| C961538-00-D | Garilynn Billingsley |                   | 7/17/96 | File Locations   |
| C961539-00-O | Karl Drobny          | LTC-F0013         | 7/9/96  | Payment Request for Field Work Directive No. RSI-F003, Which is Submitted by Rogers Surveying, Inc. for Verifying the Top of Concrete Elevation for the Beam Tube Slab Along the Southwest Arm |
| C961540-00-O | Paul Lydig           |                   | 6/18/96 | Proposal for IFB EJ-239, Facilities Construction in Hanford  |
| C961544-00-D | Eric Ponslet         | HYTEC-TN-LIGO-04  | 7/12/96 | Design Description of the Two Metal Spring Concepts for LIGO   |
| C961545-00-O | Paul G. Levernier    |                   | 7/18/96 | Proposal for RFP-TL-240  |
| C961546-00-O | C. Henry             |                   | 7/2/96  | Unsuitable Material at Ligo Project  |
| C961547-00-O | C. Henry             |                   | 7/10/96 | Stranco Request for Survey by ABMB   |
| C961548-00-O | C. Henry             |                   | 7/5/96  | Minutes of Construction Progress Meeting on 7/3/96 - Livingston  |
| C961550-00-O | Tim Melott           | 960621-2          | 6/21/96 | Transmittal of Livingston Civil Construction Final Design Review (FDR) Drawings and Documentation  |
| C961551-00-B | Larry Jones          |                   | 7/19/96 | Technical Information Memorandum (TIM) 018 - Baffle Positioning: Axial Tolerances  |
| C961552-00-B | Larry Jones          |                   | 7/19/96 | Technical Direction Memorandum (TDM) 96-005 -Spiral Weld Speeds  |
| C961553-00-B | Larry Jones          |                   | 7/19/96 | Document Transmittals  |
| C961555-00-E | Irena Petrac         |                   | 7/22/96 | Addendum #1 to Request for Quotation (RFQ) TL-243 for Fused Silica Mirror Blanks   |
| C961556-00-E | Irena Petrac         |                   | 7/22/96 | Addendum #1 to Request for Quotation (RFQ) TL-243 for Fused Silica Mirror Blanks   |
| C961557-00-E | Irena Petrac         |                   | 7/22/96 | Addendum #1 to Request for Quotation (RFQ) TL-243 for Fused Silica Mirror Blanks   |
| C961558-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Schedule for LIGO Beam Tube Modules (CDRL 01, Revision 01, DRD 01)   |
| C961559-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Resource Plan for LIGO Beam Tube Modules (CDRL 04, DRD 01)   |
| C961560-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Subcontract Plan for LIGO Beam Tube Modules (CDRL 06, Revision 01, DRD 02)   |
| C961561-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Acceptance Test Plan for LIGO Beam Tube Modules (CDRL 09, Revision 01, DRD 02)   |
| C961562-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Design Document Revisions Sprial Weld Quality for LIGO Beam Tube Modules (CDRL 15, Revision 01, DRD 03)  |
| C961563-00-B | Marty Tellalian      | CBI-CT 2.2/0117   | 7/17/96 | Design Document Revisions Welding Procedure Specifications and Qualifications for LIGO Beam Tube Modules (CDRL 24, Revision 02, DRD 03)  |
| C961565-00-B | Lance Buboltz        | CBI-CT 2.2/0117   | 7/18/96 | Submittal of Revised CDRL's 01, 04, 06, 09, 15, 24-6   |
| C961566-00-B | Lance Buboltz        | CBU-CT 2.2/0118   | 7/18/96 | Transmittal of Signed TIM-017  |
| C961568-00-B | Lance Buboltz        | CBI-CT-2.2/0120   | 7/15/96 | Submittal of Purchase Orders #162449, #162462, #162604, #162605, #162611, and #162632  |
| C961569-00-B | Lance Buboltz        | CBI-CT-2.2/0119   | 7/16/96 | Project Status Review Data Package - CDRL #25g   |
| C961571-00-B | Larry Jones          |                   | 7/23/96 | TDM 96-006, CDRL 24-6, 15  |
| C961572-00-O | Fred Asiri           |                   | 7/24/96 | Addendum Three Contract Addition   |
| C961573-00-O | Tim Melott           | 960723-0          | 7/23/96 | Questions from Bid Addendum Number 3 and Revised Index to be added to the Contract with Levernier Construction Inc.  |
| C961574-00-O | Mel Weingart         | 960703-0          | 7/3/96  | Design Configuration Control Document (DCCD), FINAL Issue, Revision 6 (CDRL 08, DRD 03)  |
| C961575-00-O | Tim Melott           | 960723-1          | 7/23/96 | Livingston Civil Construction Final Design Report (FDR) -- Volume III, Cost Estimate, DRAFT (CDRL 17, DRD 06)  |
| C961576-00-O | Tim Melott           | 960723-1          | 7/23/96 | Hanford Civil Construction Issued for Construction Drawings  |
| C961577-00-O | Tim Melott           | 960723-1          | 7/23/96 | Hanford Final Design Report (FDR), Sealed Bid Estimate -- FINAL (CDRL 16, DRD 06)  |
| C961578-00-O | Tim Melott           | 960723-1          | 7/23/96 | Transmittal of Livingston Civil Construction FDR Estimate, and Hanford Civil Construction Drawings and Sealed Bid Estimate   |
| C961579-00-O | Ed Jasnow            |                   | 6/10/96 | Addendum No.3 to IFB EJ-239 (LIGO-C961165-00-O)  |
| C961580-00-O | Ed Jasnow            |                   | 5/29/96 | Transmittal Letter for Addendum No.2 to IFB EJ-239 (LIGO-C961165-00-O)   |
| C961581-00-B | Larry Jones          |                   | 7/24/96 | Needs for Information from CBI   |
| C961582-00-O | Pamela J. Hernandez  |                   | 5/17/96 | Request for Full Size Drawings of IFB EJ-239   |
| C961583-00-O | Timothy Lewis        |                   | 5/15/96 | Request for Full Size Drawings of IFB EJ239  |
| C961584-00-V | Richard Bagley       |                   | 7/11/96 | Status Report (CDRL 09-8)  |
| C961585-00-P |                      | 0005724 (inv. #)  | 7/14/96 | Invoice from Australian National University  |
| C961587-00-B | Lance Buboltz        | CBI-CT 2.2/0115   | 7/2/96  | Nonconformance Reports NCR 002, NCR 003, NCR 004 (CDRL 42b, DRD 21)  |
| C961588-00-D | Lisa Kahler          |                   | 7/25/96 | Date Extension on LIGO Project   |
| C961589-00-D | Marc Schneider       | 9607054 (Quote #) | 7/24/96 | Quotation in Response to RFQ TL-243 for Fused Silica Optical Blanks  |
| C961590-00-B | Lance Buboltz        | CBI-CT 2.2/0122   | 7/22/96 | Project Status Review (PSR) Meeting Minutes for 15-16 July 1996  |
| C961591-00-O | Fred Asiri           |                   | 7/25/96 | Transmittal of Hanford Construction Set Drawings for Information Purposes  |
| C961592-00-O | Fred Asiri           |                   | 7/25/96 | Transmittal of Hanford Facility Construction Set Drawings for Information Purposes   |
| C961593-00-O |                      | 641315 (inv. #)   | 7/8/96  | Invoice from PSI for Livingston Site   |
| C961594-00-O | Karl Drobny          | LTC-F0033         | 7/15/96 | Payment Request for Field Work Directive #SW-F003, Which is Submitted by Shannon & Wilson for Analysis of the Water for Well #2  |
| C961595-00-O | Karl Drobny          | LTC-F0032         | 7/15/96 | Invoice #4 Submitted by Shannon & Wilson, Project Geotechnical Consultants for Period 26 May 1996 through 29 June 1996   |
| C961596-00-B | Lance Buboltz        | CBI-CT 2.2/0121   | 7/22/96 | Documentation Needs for the Fabrication Readiness Review (FRR)   |
| D920001-0A-U |                      |                   |         | Isolation Plates   |
| D920002-00-U |                      |                   |         | Support Beam (4 foot chamber)  |
| D920003-00-U |                      |                   |         | Long Mode Cleaner Tank   |
| D920004-00-U |                      |                   |         | Isolator, Push Module (Molding Assembly)   |
| D920005-00-U |                      |                   |         | Push Module and Motor Assembly   |
| D920006-00-U |                      |                   |         | Isolation Stack Assembly   |

| Document No  | Full Name | ContractorDocNo | Doc Dt | Full Title  |
|--------------|-----------|-----------------|--------|---|
| D920007-00-U |           |                 |        | Mount Assembly, Isolation Stack                             |
| D920008-00-U |           |                 |        | Isolation Plates  |
| D920009-00-U |           |                 |        | Isolator, Plate   |
| D920010-00-U |           |                 |        | Upper Platform and Wire Support                             |
| D920011-00-U |           |                 |        | OSEM Assembly (with fixtures)                               |
| D920012-00-U |           |                 |        | OSEM Cage   |
| D920013-00-U |           |                 |        | Lower Cage  |
| D920014-00-U |           |                 |        | Mirror Assembly   |
| D920015-00-U |           |                 |        | Mirror Stop Assembly  |
| D920016-00-U |           |                 |        | OSEM Head Assembly  |
| D920017-00-U |           |                 |        | Hardware  |
| D920018-00-U |           |                 |        | Bonding Fixture, Mirror Assembly                            |
| D920019-00-U |           |                 |        | Adjust Fixture Heel Clamp                                   |
| D920020-00-U |           |                 |        | Fixture, OSEM Head Adjust                                   |
| D920021-00-U |           |                 |        | Adjust Fixture, Mirror Wire                                 |
| D920022-00-U |           |                 |        | Clamp/Angle Block, Shaker Fixture                           |
| D920023-00-U |           |                 |        | Plates, Shaker Fixture                                      |
| D920024-00-U |           |                 |        | Large Adaptor Plate, Shaker Table                           |
| D920025-00-U |           |                 |        | Bottom Plate, Spring Comp. Fixture                          |
| D920026-00-U |           |                 |        | (-1)Mid Plate(shown)/(-2)Top Plate, Spring Comp. Fixture    |
| D920027-00-U |           |                 |        | (-1)Threaded Rod/(-2)Spacer, Spring Comp. Fixture           |
| D920028-00-U |           |                 |        | Bell Jar Plate, Spring Comp. Fixture                        |
| D920029-00-U |           |                 |        | Coil Form Test Mass Opentation Mark II                      |
| D920030-00-U |           |                 |        | Coil Form Test Mass Axial Mark II                           |
| D920031-00-U |           |                 |        | Filter/Baffel Adaptor, Quad Detector Assembly, Mark II      |
| D920032-00-U |           |                 |        | Modified Front Cover, Quad Detector Assembly, Mark II       |
| D920033-00-U |           |                 |        | 1)Gusset 2)Base, 2" Mirror Mount 3)Base, 1.5"Mirror Mount   |
| D920033-0A-U |           |                 |        | 1)Gusset 2)Base, 2" Mirror Mount 3)Base, 1.5"Mirror Mount   |
| D920034-00-U |           |                 |        | 1)Plate, 2" Mirror 2) Plate, B.S., Mirror Mount             |
| D920034-0A-U |           |                 |        | 1)Plate, 2" Mirror 2) Plate, B.S., Mirror Mount             |
| D920035-00-U |           |                 |        | 1)Holder 2)Insert, flat 3)Insert, c'sink, 2" Mirror Mount   |
| D920036-00-U |           |                 |        | 1)Plate, 1.5" Mirror 2) Plate, B.S., 1.5" Mirror Mount      |
| D920037-00-U |           |                 |        | 1)Holder 2)Insert, flat 3)Insert, c'sink, 1.5" Mirror Mount |
| D920038-00-U |           |                 |        | Lower Plate, Beam Splitter Mount                            |
| D920039-00-U |           |                 |        | Upper Plate, Beam Splitter Mount                            |
| D920040-00-U |           |                 |        | Misc. Parts, Beam Splitter Mount                            |
| D920041-00-U |           |                 |        | 45 Degree Mirror Block, Periscope                           |
| D920042-00-U |           |                 |        | Stand, Mirror Block, Periscope                              |
| D920043-00-U |           |                 |        | Periscope, Vertex TM Chamber                                |
| D920044-00-U |           |                 |        | Parts, Stack Connector Bracket                              |
| D920045-00-U |           |                 |        | Bracket & Cover, Table connector Bracket                    |
| D920046-00-U |           |                 |        | Parts, LEMO Connector Bracket                               |
| D920047-00-U |           |                 |        | New Plate, End Test Mass Support                            |
| D920048-00-U |           |                 |        | New Plate, Vertex Test Mass Support                         |
| D920049-00-U |           |                 |        | Rotation Table Modification, End Test Mass Support          |
| D920050-00-U |           |                 |        | Upper Plate Mod., Rotary Table, Vertex TM Support           |
| D920051-00-U |           |                 |        | Thorlabs Parts Mods., Test Mass Supports                    |
| D920052-00-U |           |                 |        |   |
| D920053-0A-U |           |                 |        |   |
| D920054-00-U |           |                 |        |   |
| D920055-00-U |           |                 |        |   |
| D920056-0A-U |           |                 |        |   |
| D930001-00-B |           |                 |        | P&I Diagrams for the split systems                          |
| D930002-00-U |           |                 |        | Rotation Cells, Clamp, Faraday Rotator                      |
| D930003-0A-U |           |                 |        | Miscellaneous Parts, Faraday Rotator                        |
| D930004-00-U |           |                 |        | Wave Plate Mount, Beamsplitter Chamber                      |
| D930005-00-U |           |                 |        | Wave Plate Housing, Wave Plate Mount                        |

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| D930006-0A-U |                               |                 |         | Miscellaneous Parts, Wave Plate Mount   |
| D930007-00-U |                               |                 |         | Carriage, Pockel's Cell   |
| D930008-0A-U |                               |                 |         | Rail Parts, B.S. Optics   |
| D930009-00-U |                               |                 |         | Rolls, Rail Assemblies  |
| D930010-00-U |                               |                 |         | Parts Polarizer Mount   |
| D930011-00-U |                               |                 |         | Parts, Tilt Wave Plate Cell   |
| D930012-00-U |                               |                 |         | Viewport TM Camera Assembly   |
| D930013-00-U |                               |                 |         | Faraday Rotator Housing, New Faraday Rotator  |
| D930014-00-U |                               |                 |         | Polarizer Housing, New Faraday Rotator  |
| D930015-00-U |                               |                 |         | New Polarizer Base, New Faraday Rotator   |
| D930016-00-U |                               |                 |         | Clamp Ring, Teflon Washer, New Faraday Rotator  |
| D930017-00-U |                               |                 |         | Carriage, Rail Polarizer Mount, PNI   |
| D930018-00-U |                               |                 |         | Polarizer Housing, Rail Polarizer Mount, PNI  |
| D930019-00-U |                               |                 |         | 1) Clamp Ring 2)Teflon Washer, PNI  |
| D930020-00-U |                               |                 |         | Rail Mount Polarizer Assembly, PNI  |
| D930021-00-U |                               |                 |         | Carriage, F.R., New Faraday Rotator   |
| D930022-00-U |                               |                 |         | 1.5" Carriage, PNI Rail   |
| D930023-00-U |                               |                 |         | Lens Housing, Lens Mount, PNI   |
| D930024-00-U |                               |                 |         | 1) & 2) Lens Spacer, 3) Lens Retainer, PNI  |
| D930025-00-U |                               |                 |         | Lens Mount Assembly, PNI  |
| D930026-00-U |                               |                 |         | Fiber Optic Mount Assembly, PNI   |
| D930027-00-U |                               |                 |         | Adaptor Block, Fiber Optic Mount, PNI Rail  |
| D930028-00-U |                               |                 |         | 1) Fiber Optic Adaptor 2) Clamp, PNI Fiber Optic Mount  |
| D930029-00-U |                               |                 |         | Double P.C. Bracket, Pockel's Cell Mount, PNI Rail  |
| D930030-00-U |                               |                 |         | Double P.C. Mount Assembly, PNI Rail  |
| D930031-00-U |                               |                 |         | Rail Mounting Brackets, PNI   |
| D930032-00-U |                               |                 |         | Rail Plate, PNI   |
| D930033-00-U |                               |                 |         | Rail Assembly, PNI  |
| D930034-00-U |                               |                 |         | New Faraday Rotator Assembly  |
| D930035-0C-U |                               |                 |         | Right Side Plate, PNI Suspension  |
| D930036-0C-U |                               |                 |         | Left Side Plate, PNI Suspension   |
| D930037-00-U |                               |                 |         |   |
| D940001-01-B |                               |                 |         | M. Tellalian to J. Carusiello(Meyer Tool & Mfg. Inc.) re. Baffle Cleaning Requirements/Baffle Fabrication Specification |
| D940002-00-B |                               |                 |         | Details of slip-on blind flanges used for leak checking 24" tubes at CIT  |
| D940003-01-B |                               |                 |         | Drawing revisions for the modified support frames   |
| D940004-00-V | California Institute of Tech. | 1101051         | 11/9/94 | Attachment Brackets HAM, BSC, TMC Chambers  |
| D940005-00-V | California Institute of Tech. | 1101013         | 11/9/94 | Test Mass Chamber (TMC)   |
| D940006-00-V | California Institute of Tech. | 1101010         | 11/9/94 | Horizontal Access Module  |
| D940007-00-V | California Institute of Tech. | 1101009         | 11/9/94 | Beam Splitter Chamber (BSC)   |
| D940008-00-V | California Institute of Tech. | 1101103         | 11/9/94 | Vacuum Equipment Mid Stations   |
| D940009-00-V | California Institute of Tech. | 1101102         | 11/9/94 | Vacuum Equipment End Stations   |
| D940010-00-V | California Institute of Tech. | 1101101         | 11/9/94 | Vacuum Equipment Corner Station   |
| D940011-00-V | California Institute of Tech. | 1101100         | 11/9/94 | Vacuum Equipment Corner Station   |
| D940012-00-V | California Institute of Tech. |                 | 12/1/94 | Ligo Vacuum System - Louisiana  |
| D940013-00-V | California Institute of Tech. |                 | 12/1/94 | Ligo Vacuum System - Washington Site  |
| D950000-00-U |                               |                 | 11/7/95 |   |
| D950001-00-U |                               |                 |         | Power Stabilization Amplifier   |
| D950002-00-U |                               |                 |         | Laser Loop Amplifier  |
| D950003-00-U |                               |                 |         | Laser PZT Driver  |
| D950004-00-U |                               |                 |         | Steering Mirror PZT Driver  |
| D950005-00-D |                               |                 |         | Doug  |
| D950006-00-D |                               |                 |         | Doug  |
| D950007-00-D |                               |                 |         | Doug  |
| D950008-00-D |                               |                 |         | Doug  |
| D950009-00-D |                               |                 |         | Doug  |
| D950010-00-D |                               |                 |         | Doug  |
| D950011-00-D |                               |                 |         | Doug  |

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| D950012-00-D |              |                   |          | Doug  |
| D950013-00-D |              |                   |          | Doug  |
| D950014-00-D |              |                   |          | Doug  |
| D950015-00-D |              |                   |          | Doug  |
| D950016-00-D |              |                   |          | Doug  |
| D950017-00-D |              |                   |          | Doug  |
| D950018-00-D |              |                   |          | Doug  |
| D950019-00-D |              |                   |          | Doug  |
| D950020-00-U |              |                   |          | Test Mass LIGO Pathfinder   |
| D950020-0A-U |              |                   |          | Test Mass LIGO Pathfinder   |
| D950020-B-D  |              |                   | 4/1/95   | Test Mass LIGO Pathfinder   |
| D950021-00-B |              |                   |          | LIGO Arm Layouts  |
| D950021-C-E  | Dennis Coyne |                   | 2/26/96  | LIGO Arm Layouts  |
| D950022-00-U |              |                   |          | PSL Laser System Wiring Diagram   |
| D950023-00-U |              |                   |          | PSL Power Stabilization System Diagram  |
| D950024-00-U |              |                   |          | PSL Reference Cavity Steering Mirror System Diagram   |
| D950025-00-U |              |                   |          | PSL Frequency Stabilization System Diagram  |
| D950026-00-U |              |                   |          | PSL Rack Wiring (VME module to cross connect mass termination connections)                        |
| D950027-00-B |              |                   | 6/22/95  | Beam Tube Pump Port, Hardware   |
| D950027-B-B  | Larry Jones  |                   | 11/3/95  | Beam Tube Pump Port Hardware  |
| D950028-00-B |              |                   | 6/22/95  | Beam Tube Terminations  |
| D950028-B-B  | Larry Jones  |                   | 3/12/96  | Beam Tube Terminations  |
| D950029-00-B |              |                   |          | Beam Tube Enclosure Interface   |
| D950029-A-B  |              |                   | 7/27/95  | Beam Tube/ Enclosure Interface  |
| D950030-00-B |              |                   |          | Beam Tube Module Bake   |
| D950031-03-B |              |                   |          | General Module Configuration  |
| D950031-04-B | CBI          | CBI 1, Rev. 4     | 11/10/95 | General Module Configuration and Vacuum Port Location, Hanford and Livingston                     |
| D950032-02-B | CBI          | CBI 2, Rev. 2     | 11/10/95 | Sub-Modules A & D, LIGO Beam Tube Modules - Hanford and Livingston                                |
| D950033-03-B | CBI          | CBI 3, Rev. 3     | 11/10/95 | Sub-Modules E, F, G, & H - LIGO Beam Tube Modules - Hanford and Livingston                        |
| D950034-02-B | CBI          | CBI 4, Rev. 2     | 11/10/95 | Sub-Assemblies A, B, & C - LIGO Beam Tube - Hanford and Livingston                                |
| D950035-03-B | CBI          | CBI 6, Rev. 3     | 11/10/95 | Elevation, Beam Tube Fixed Support - Hanford and Livingston                                       |
| D950036-04-B | CBI          | CBI 7, Rev. 4     | 11/10/95 | Plan View and Details, Beam Tube Fixed Support - Hanford and Livingston                           |
| D950037-05-B | CBI          | CBI 8, Rev. 5     | 11/10/95 | Support Lug Assembly and Section Details, Beam Tube Fixed/Guided Support - Hanford and Livingston |
| D950038-02-B | CBI          | CBI 9, Rev. 2     | 11/10/95 | Sub-Assemblies H, J, K, & L - LIGO Beam Tube Modules - Hanford and Livingston                     |
| D950039-02-B | CBI          | CBI 13, Rev. 2    | 11/10/95 | Pump Ports, Beam Tube - Hanford and Livingston  |
| D950040-02-B | CBI          | CBI 15, Rev. 2    | 11/10/95 | Vacuum Stiffener, Beam Tube - Hanford and Livingston  |
| D950041-02-B |              |                   |          |   |
| D950041-03-B | CBI          | CBI 16, Rev. 3    | 11/10/95 | Support Ring, Beam Tube - Hanford and Livingston  |
| D950042-03-B | CBI          | CBI 17, Rev. 3    | 11/10/95 | Elevation, Beam Tube Guided Support - Hanford and Livingston                                      |
| D950043-03-B |              |                   |          |   |
| D950043-04-B | CBI          | CBI 18, Rev. 4    | 11/10/95 | Section Details, Beam Tube Guided Support - Hanford and Livingston                                |
| D950044-03-B | CBI          | CBI 19, Rev. 3    | 11/10/95 | Section Details, Beam Tube Guided Support - Hanford and Livingston                                |
| D950045-02-B | CBI          | CBI ER1, Rev. 2   | 11/10/95 | Support Leveling, Beam Tube Fixed and Guided Support - Hanford and Livingston                     |
| D950046-01-B | CBI          | CBI ER4, Rev. 1   | 11/10/95 | Fabrication Shop Top View at Stiffener Fit and Weld Station                                       |
| D950047-01-B | CBI          | CBI ER14, Rev. 1  | 11/10/95 | Cross Section of Truck Loading for Shipment of Unstiffened Tube Sections                          |
| D950048-01-B | CBI          | CBI ER-15, Rev. 1 | 11/10/95 | Elevation of Truck Loading for Unstiffened Tube Shipment  |
| D950049-01-B | CBI          | CBI ER-16, Rev. 1 | 11/10/95 | Transport and Handling Frame for Unstiffened Tube Sections  |
| D950050-03-B | CBI          | CBI ER-45, Rev. 3 | 11/10/95 | Fit Up Clamp  |
| D950051-03-B | CBI          | CBI ER-46, Rev. 3 | 11/10/95 | Fit Up Clamp Details  |
| D950052-01-B | CBI          | CBI ER-50, Rev. 1 | 11/10/95 | Leak Test Station, Isometric View - Leak Test Arrangement   |
| D950053-04-B | CBI          | CBI ER-51, Rev. 4 | 11/10/95 | Helium Hood, Leak Test Station - Leak Test Arrangement  |
| D950054-02-B | CBI          | CBI ER-54, Rev. 2 | 11/10/95 | Standard Hood Test Enclosure, Top Section - Leak Test Arrangement                                 |
| D950055-02-B | CBI          | CBI ER-55, Rev. 2 | 11/10/95 | Standard Hood Test Enclosure, Bottom Section - Leak Test Arrangement                              |
| D950056-02-B | CBI          | CBI ER-56, Rev. 2 | 11/10/95 | Hood Test Enclosure, Helium Hood Details - Leak Test Arrangement                                  |
| D950057-04-B | CBI          | CBI ER-57, Rev. 4 | 11/10/95 | Saddle and Hinge, Helium Hood - Leak Test Arrangement   |
| D950058-04-B | CBI          | CBI ER-58, Rev. 4 | 11/10/95 | Saddle and Hinge Details - Leak Test Arrangement  |
| D950059-02-B | CBI          | CBI ER-59, Rev. 2 | 11/10/95 | Helium Hood Enclosure Equipment - Leak Test Arrangement   |

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| D950060-02-B | CBI         | CBI ER-60, Rev. 2  | 11/10/95 | Vacuum Pump End Seal - Leak Test Arrangement   |
| D950061-02-B | CBI         | CBI ER-61, Rev. 2  | 11/10/95 | Vacuum Pump End Seal Assembly - Leak Test Arrangement  |
| D950062-02-B | CBI         | CBI ER-62, Rev. 2  | 11/10/95 | Vacuum Port End Seal, Carriage Subassembly - Leak Test Arrangement   |
| D950063-02-B | CBI         | CBI ER-63, Rev. 2  | 11/10/95 | Vacuum Pump End Seal, Rolling Base Subassembly - Leak Test Arrangement   |
| D950064-02-B | CBI         | CBI ER-64, Rev. 2  | 11/10/95 | Vacuum Pump End Seal, End Cap Subassembly - Leak Test Arrangement  |
| D950065-02-B | CBI         | CBI ER-45, Rev. 2  | 11/10/96 | Vacuum Pump End Seal, Lifting Frame Subassembly - Leak Test Arrangement  |
| D950066-02-B | CBI         | CBI ER-66, Rev. 2  | 11/10/95 | Mechanical Vacuum Pump Line Subassembly - Leak Test Arrangement  |
| D950067-02-B | CBI         | CBI ER-67, Rev. 2  | 11/10/95 | Vacuum Pump End Seal, Diffusion Pump Line Subassembly - Leak Test Arrangement  |
| D950068-02-B | CBI         | CBI ER-68, Rev. 2  | 11/10/95 | Vacuum Pump End Seal, Cross-Over Line Subassembly - Leak Test Arrangement  |
| D950069-02-B | CBI         | CBI ER-69, Rev. 2  | 11/10/95 | Vacuum Pump End Seal, Interspace Vacuum Pump Line Subassembly, Sensors Connection Subassembly - Leak Test Arrangement      |
| D950070-02-B | CBI         | CBI ER-70, Rev. 2  | 11/10/95 | Cold Trap End Seal - Leak Test Arrangement   |
| D950071-02-B | CBI         | CBI ER-71, Rev. 2  | 11/10/95 | Cold Trap End Seal Assembly - Leak Test Arrangement  |
| D950072-02-B | CBI         | CBI ER-72, Rev. 2  | 11/10/95 | Cold Trap Seal End, Carriage Subassembly - Leak Test Arrangement   |
| D950073-02-B | CBI         | CBI ER-73, Rev. 2  | 11/10/95 | Cold Trap End Seal, Rolling Base Subassembly - Leak Test Arrangement   |
| D950074-02-B | CBI         | CBI ER-74, Rev. 2  | 11/10/95 | Cold Trap Seal End, End Cap Assembly - Leak Test Arrangement   |
| D950075-02-B | CBI         | CBI ER-75, Rev. 2  | 11/10/95 | Cold Trap End Seal, Lifting Frame Subassembly - Leak Test Arrangement  |
| D950076-02-B | CBI         | CBI ER-76, Rev. 2  | 11/10/95 | Cold Trap End Seal, Cold Trap Line Subassembly - Leak Test Arrangement   |
| D950077-02-B | CBI         | CBI ER-77, Rev. 2  | 11/10/95 | Cold Trap End Seal, Cold Trap Evacuation Line Subassembly, Interspace Vacuum Pump Line Subassembly - Leak Test Arrangement |
| D950078-01-B | CBI         | CBI ER-96, Rev. 1  | 11/10/95 | Protective End Cap   |
| D950079-04-B | CBI         | CBI ER-121, Rev. 4 | 11/10/95 | Circumferential Leak Test Box (Formerly ER-122)  |
| D950080-04-B | CBI         | CBI ER-122, Rev. 4 | 11/10/95 | Circumferential Leak Test Box (Formerly ER-123)  |
| D950081-01-B | CBI         |                    |          | .  |
| D950081-02-B | CBI         | CBI ER-123, Rev. 2 | 11/10/95 | He Mass Spectrometer Test Arrangement  |
| D950082-01-B |             |                    |          |  |
| D950082-02-B | CBI         | CBI ER-125, Rev. 2 | 11/10/95 | Vacuum Port, Leak Test Box   |
| D950083-00-B |             |                    |          |  |
| D950083-01-B | CBI         | CBI ER-126, Rev. 1 | 11/10/95 | Pieces, Vacuum Port, Leak Test Box   |
| D950084-00-B | CBI         | CBI ER-127, Rev. 0 | 11/10/95 | Pump Port Welding Jig and Repair Jack  |
| D950085-02-B | CBI         | CBI ER-133, Rev. 2 | 11/10/95 | Fit-Up Welding and Leak Testing Configurations at Fixed Supports   |
| D950086-02-B | CBI         | CBI ER-134, Rev. 2 | 11/10/95 | Fit-Up Welding and Leak Testing Configurations at Guide Supports   |
| D950087-01-B | CBI         | CBI ER-140, Rev. 1 | 11/10/95 | Elevation View of Tube Installation  |
| D950088-00-U |             |                    |          |  |
| D950089-00-U |             |                    |          |  |
| D950090-01-0 |             |                    |          |  |
| D950091-00-D |             |                    | 7/18/95  | Mode Cleaner Ring Down Detector, Unit Serial #0  |
| D950092-00-D |             |                    | 7/19/95  | Recombination Coil Drivers   |
| D950093-00-B |             |                    | 7/20/95  | Beam Tube Termination Foundations  |
| D950093-A-B  |             |                    | 7/27/95  | Beam Tube Termination Foundations  |
| D950094-A-B  | Larry Jones |                    | 8/4/95   | Beam Tube Baffle   |
| D950094-B-B  | Larry Jones |                    | 8/16/96  | Beam Tube Baffle   |
| D950094-C-B  | Larry Jones |                    | 10/19/95 | Beam Tube Baffle   |
| D950095-00-C |             |                    | 7/24/95  | PSL Controls Rack  |
| D950096-00-C |             |                    | 7/24/95  | Power Monitoring Photodiode  |
| D950097-00-C |             |                    | 7/24/95  | RF Photodiode  |
| D950098-00-C |             |                    | 7/24/95  | PSL Vacuum and Temperature Controls  |
| D950099-00-C |             |                    | 7/24/95  | PSL Phase Modulation System  |
| D950100-00-O |             |                    | 7/31/95  | Louisiana Legal Description of Site  |
| D950101-03-C |             |                    | 7/31/95  | Transcontinental Pipeline Crossing for Louisiana Site  |
| D950102-A-B  |             |                    | 8/4/95   | Beam Tube Baffle   |
| D950103-00-D |             |                    | 8/9/95   | 12.3 MHZ DIGITAL CONTROL PHASE SHIFTER, SERIAL #001PS  |
| D950104-00-D |             |                    | 8/23/95  | 40M Suspension Assembly  |
| D950105-00-D |             |                    | 8/23/95  | Sensor/Actuator Head Assembly  |
| D950106-00-D |             |                    | 8/23/95  | Base   |
| D950107-00-D |             |                    | 8/23/95  | Safety Cage Base   |
| D950108-00-D |             |                    | 8/23/95  | Front Leg  |
| D950109-00-D |             |                    | 8/23/95  | Back Leg   |
| D950110-00-D |             |                    | 8/23/95  | Face Bracket   |

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| D950111-00-D |              |                 | 8/23/95  | Safety Cage Cradle   |
| D950112-00-D |              |                 | 8/23/95  | Corner Bracket, One  |
| D950113-00-D |              |                 | 8/23/95  | Corner Bracket, Two  |
| D950114-00-D |              |                 | 8/23/95  | Head Holder, Bottom  |
| D950115-00-D |              |                 | 8/23/95  | Head Holder, Side  |
| D950116-00-D |              |                 | 8/23/95  | Head Holder, Top   |
| D950117-00-D |              |                 | 8/23/95  | Sensor/Actuator Head   |
| D950118-00-D |              |                 | 8/23/95  | Brace  |
| D950119-00-D |              |                 | 8/23/95  | Safety Bar   |
| D950120-00-D |              |                 | 8/23/95  | Top Plate  |
| D950121-00-D |              |                 | 8/23/95  | Suspension Block   |
| D950122-00-D |              |                 | 8/23/95  | Wire Clamp   |
| D950123-00-D |              |                 | 8/23/95  | Suspension Screw   |
| D950124-00-D |              |                 | 8/23/95  | Stiffener Plate, Front   |
| D950125-00-D |              |                 | 8/23/95  | Stiffener Plate, Side  |
| D950126-00-D |              |                 | 8/23/95  | Tool, Sensor/Actuator Assembly   |
| D950127-00-D |              |                 | 8/23/95  | Tool, Magnet/Standoff/Wire Standoff Bonding  |
| D950128-00-D |              |                 | 8/23/95  | Wire Standoff  |
| D950129-00-E | Allen Sibley |                 | 9/29/95  | LVEA Layout  |
| D950130-SK-O | Dennis Coyne |                 | 10/20/95 | Beam Tube Termination Slabs Relative to Buildings                                      |
| D950131-SK-V | John Worden  |                 | 10/19/95 | LVEA Corner Station - Crane Arrangement and Hook Coverage, Preliminary                 |
| D950132-SK-V | John Worden  |                 | 10/19/95 | Ham Chamber, Detector Equipment Reserved Space, Preliminary                            |
| D950133-SK-V | John Worden  |                 | 10/19/95 | Ham Chamber, Detector Equipment Reserved Space, Preliminary                            |
| D950134-SK-V | John Worden  |                 | 10/19/95 | BSC Chamber, Detector Equipment Reserved Space, Preliminary                            |
| D950135-SK-V | John Worden  |                 | 10/19/95 | BSC Chamber, Detector Equipment Reserved Space, Preliminary                            |
| D950136-SK-V | John Worden  |                 | 10/19/51 | Plan "A-A", E Port Locations, Preliminary  |
| D950137-SK-V | John Worden  |                 | 10/19/95 | BSC, New Port Locations, Preliminary   |
| D950139-A-B  | Dennis Coyne |                 | 11/29/95 | BTE Service Access and Beam Tube Pump Port Locations                                   |
| D950141-SK-V |              |                 | 10/31/95 | Corner Station Washington  |
| D950142-SK-V | John Worden  |                 | 10/31/95 | Mid Station Washington   |
| D950143-SK-V | John Worden  |                 | 10/31/95 | End Station Washington   |
| D950144-SK-E | Dennis Coyne |                 | 12/18/95 | VE Electrical Power Locations - LVEA   |
| D950145-00-E | Craig Conley |                 | 4/2/96   | Conduit Stub-Up Locations for Detector System (Power, Signal, Coolant): Corner Station |
| D950145-SK-O | Rolf Bork    |                 | 10/26/95 | CDS Power Locations in the LVEA  |
| D950145-SK-O | Jay Heefner  |                 | 10/26/95 | CDS Power Locations in the LVEA  |
| D950145-SK-O | Dennis Coyne |                 | 10/26/95 | CDS Power Locations in the LVEA  |
| D950146-SK-V | John Worden  |                 | 10/31/95 | Ham Port Relocation, Preliminary   |
| D950164-00-D | Janeen Hazel |                 | 12/13/95 | Super Mirror Container Assembly, 1"  |
| D960000-00-U |              |                 | 7/19/96  |  |
| D960001-00-D | Janeen Hazel |                 | 5/23/96  | Small Optic Suspension (SOS) Assembly  |
| D960002-00-D | Janeen Hazel |                 | 5/23/96  | Sensor/Actuator Plate  |
| D960003-00-D | Janeen Hazel |                 | 5/23/96  | Suspension Block   |
| D960004-00-D | Janeen Hazel |                 | 5/23/96  | Tower Base   |
| D960005-00-D | Janeen Hazel |                 | 5/23/96  | Right Side Plate   |
| D960006-00-D | Janeen Hazel |                 | 5/23/96  | Left Side Plate  |
| D960007-00-D | Janeen Hazel |                 | 5/23/96  | Upper Mirror Clamp   |
| D960008-00-D | Janeen Hazel |                 | 5/23/96  | Lower Mirror Clamp   |
| D960009-00-D | Janeen Hazel |                 | 5/23/96  | Stiffener Plate  |
| D960010-00-D | Janeen Hazel |                 | 5/23/96  | Smaller Standoff   |
| D960011-00-D | Janeen Hazel |                 | 5/23/96  | Sensor/Actuator Head Assembly  |
| D960012-00-D | Janeen Hazel |                 | 5/23/96  | Sensor/Actuator Head   |
| D960014-00-D | Janeen Hazel |                 | 5/23/96  | Thumb Screw, Teflon, Small   |
| D960017-00-D | Janeen Hazel |                 | 5/23/96  | Base Plate   |
| D960018-00-D | Janeen Hazel |                 | 5/23/96  | Right Block  |
| D960019-00-D | Janeen Hazel |                 | 5/23/96  | Left Block   |
| D960020-00-D | Janeen Hazel |                 | 5/23/96  | Magnet/Standoff Assembly Fixture   |
| D960021-00-D | Janeen Hazel |                 | 5/23/96  | Kapton Template  |

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| D960022-00-D | Janeen Hazel                |                     | 5/23/96  | Guide Rod Fixture  |
| D960030-00-V | Richard Bagley              | V049-5-005          | 2/15/96  | Equipment Arrangement, Right-End Station - Washington/Louisiana Sites  |
| D960031-00-V | Richard Bagley              | V049-5-004          | 2/15/96  | Equipment Arrangement, Right-Mid Station - Washington - LIGO Vacuum Equipment  |
| D960032-00-V | Richard Bagley              | V049-5-001          | 2/15/96  | Equipment Arrangement Plan, Corner Station, Washington - LIGO Vacuum Equipment   |
| D960033-00-B | Larry Jones                 |                     | 1/25/95  | LIGO Beam Tube QT Module Items Shipped to Caltech  |
| D960041-00-E | Dennis Coyne                |                     | 3/1/96   | BTE - Pump Cart Layout: Roughing Pump System   |
| D960042-00-V | Process Systems Int'l, Inc. | V049-3-124, Rev. P1 | 2/29/96  | Electrical Conduit Stub-Up Plan, LIGO Vacuum Equipment, Washington Site Corner Station   |
| D960043-00-V | Process Systems Int'l, Inc. | V049-3-305, Rev. P1 | 2/29/96  | Electrical Conduit Stub-Up Plan, LIGO Vacuum Equipment, Washington Site Right Mid Station  |
| D960044-00-V | Process Systems Int'l, Inc. | V049-3-505, Rev. P1 | 2/29/96  | Electrical Conduit Stub-Up Plan, LIGO Vacuum Equipment, Washington Site Right End Station  |
| D960045-A-B  | Craig Conley                |                     | 3/20/96  | Beam Tube Baffle, Full Serration, Fabrication and Porcelain Coverage Detail  |
| D960045-B-B  | Craig Conley                |                     | 4/25/96  | Beam Tube Baffle, Full Serration, Fabrication and Porcelain Coverage Detail  |
| D960046-A-B  | Craig Conley                |                     | 3/20/96  | LIGO Beam Tube Baffle, Non-Serrated, Fabrication and Porcelain Coverage Detail   |
| D960046-B-B  | Craig Conley                |                     | 4/25/96  | Beam Tube Baffle, Non-Serrated, Fabrication and Porcelain Coverage Detail  |
| D960047-00-B | Larry Jones                 |                     | 3/8/96   | Hanford Beam Tube Details for Baffle Position Calculations   |
| D960050-00-D | Janeen Hazel                |                     | 5/23/96  | Magnet/Standoff Assembly Fixture   |
| D960051-A-B  | Larry Jones                 |                     | 3/12/96  | Beam Tube Gate Valve Soft Support  |
| D960051-C-B  | Larry Jones                 |                     | 7/19/96  | Beam Tube Gate Valve Soft Support  |
| D960052-00-O | Ralph M. Parsons Company    | WA-S-003, Rev. A    | 10/31/95 | Structural Standard, Concrete and CMU Details - Hanford  |
| D960053-00-O | Ralph M. Parsons Company    | WA-S-101, Rev. A    | 10/31/95 | Structural, Corner Station, LVEA Foundation Plan - Hanford   |
| D960054-00-O | Ralph M. Parsons Company    | WA-S-201, Rev. A    | 10/31/95 | Structural, Mid-Station and Chiller, Foundation Plans - Hanford  |
| D960055-00-O | Ralph M. Parsons Company    | WA-S-208            | 3/8/96   | Structural, End Station, Foundation Plans - Hanford  |
| D960056-00-O | Ralph M. Parsons Company    | WA-S-405            | 3/8/96   | Structural, Foundation, Sections and Details, Sheet 1 - Hanford  |
| D960057-00-O | Ralph M. Parsons Company    | WA-S-406            | 3/8/96   | Structural, Foundation, Sections and Details, Sheet 2 - Hanford  |
| D960058-00-O | Ralph M. Parsons Company    | WA-C-021            | 10/31/95 | Civil, Northwest Arm, Mid-Station, Plot and Utility Plans - Hanford  |
| D960059-00-O | Ralph M. Parsons Company    | WA-A-201, Rev. A    | 2/16/96  | Architectural, Mid-Stations, Floor Plans - Hanford   |
| D960060-00-O | Ralph M. Parsons Company    | WA-A-301, Rev. A    | 2/16/96  | Architectural, End Stations, Floor Plans - Hanford   |
| D960061-00-O | Ralph M. Parsons Company    | WA-A-221, Rev. A    | 10/31/95 | Architectural, Mid & End Stations, Reflected Ceiling and Roof Plan - Hanford   |
| D960062-00-O | Ralph M. Parsons Company    | WA-A-241, Rev. A    | 10/31/95 | Architectural, Mid & End Stations, Building Elevations - Hanford   |
| D960063-00-O | Ralph M. Parsons Company    | WA-A-251, Rev. A    | 10/31/95 | Architectural, Mid & End Stations, Building Sections - Hanford   |
| D960064-00-O | Ralph M. Parsons Company    | WA-H-111            | 3/8/96   | HVAC, Corner Station, LVEA Floor Plan, Sheet 1 - Hanford   |
| D960065-00-O | Ralph M. Parsons Company    | WA-H-112            | 3/8/96   | HVAC, Corner Station, LVEA Floor Plan, Sheet 2 - Hanford   |
| D960066-00-O | Ralph M. Parsons Company    | WA-H-116            | 3/8/96   | HVAC, Corner Station, Maintenance Building Floor Plan - Hanford  |
| D960067-00-O | Ralph M. Parsons Company    | WA-H-151            | 3/8/96   | HVAC, Corner Station, Sections, Sheet 1 - Hanford  |
| D960068-00-O | Ralph M. Parsons Company    | WA-H-152            | 3/8/96   | HVAC, Corner Station, Sections, Sheet 2 - Hanford  |
| D960068-00-A | Kris Showalter              |                     | 4/8/96   | This is a test   |
| D960069-00-O | Ralph M. Parsons Company    | WA-H-211            | 3/8/96   | HVAC, Mid & End Stations, Floor Plan - Hanford   |
| D960070-00-O | Ralph M. Parsons Company    | WA-H-241            | 3/8/96   | HVAC, Mid & End Stations, Sections, Sheet 1 - Hanford  |
| D960071-00-O | Ralph M. Parsons Company    | WA-H-242            | 3/8/96   | HVAC, Mid & End Stations, Sections, Sheet 2 - Hanford  |
| D960073-SK-E | Dennis Coyne                |                     | 3/13/96  | Chamber and Rack Designations  |
| D960074-00-V | Process Systems Int'l, Inc. | V049-3-305, P1      | 3/5/96   | Electrical Conduit Stub-Up Plan, LIGO Vacuum Equipment, Washington Site, Corner Station  |
| D960075-00-V | Process Systems Int'l, Inc. | V049-3-305, P1      | 2/29/96  | Electrical Conduits Stub-Up Plan, LIGO Vacuum Equipment, Washington Site, Right-Mid Station  |
| D960076-00-V | Process Systems Int'l, Inc. | V049-3-505, P1      | 2/29/96  | Electrical Conduit Stub-Up Plan, LIGO Vacuum Equipment, Hanford, Right-End Station   |
| D960101-00-V | Process Systems Int'l, Inc. | V049-3-123, Rev. 0  | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - CDS Interface Diagram, Washington Site, Corner Station |
| D960101-P1-V | Process Systems Int'l, Inc. | V049-3-123, P1      | 3/6/96   | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Corner Station   |
| D960102-00-V | Process Systems Int'l, Inc. | V049-3-208, P1      | 3/6/96   | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Left Mid Station   |
| D960103-00-V | Process Systems Int'l, Inc. | V049-3-308, Rev. 0  | 4/26/96  | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Right Mid Station  |
| D960103-P1-V | Process Systems Int'l, Inc. | V049-3-308, P1      | 3/6/96   | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Right Mid Station  |
| D960104-00-V | Process Systems Int'l, Inc. | V049-3-408, P1      | 3/6/96   | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Left End Station   |
| D960105-00-V | Process Systems Int'l, Inc. | V049-3-508, P1      | 3/6/96   | CDS Interface Diagram, LIGO Vacuum Equipment - Washington Site, Right End Station  |
| D960107-00-V | Richard Bagley              | V049-0-001          | 3/20/96  | Piping and Instrumentation Diagram (P & ID), Vacuum Equipment Legend (B/D)   |
| D960108-00-V | Richard Bagley              | V049-0-002          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), Beam Splitter Chamber (BSC), Mid Stations   |
| D960109-00-V | Process Systems Int'l, Inc. | V049-0-003          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), Beam Splitter Chamber (BSC), Corner Vertex  |
| D960110-00-V | Richard Bagley              | V049-0-004          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), Horizontal Access Module  |
| D960111-00-V | Richard Bagley              | V049-0-005          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), 112cm and 122cm Gate Valves   |
| D960112-00-V | Richard Bagley              | V049-0-006          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), 80K Cryopump  |
| D960112-02-V | Process Systems Int'l, Inc. | V049-0-006, Rev. 2  | 5/30/96  | Piping and Instrumentation Diagram (P&ID), 80K Cryopump, Revision 2  |
| D960113-00-V | Richard Bagley              | V049-0-010          | 3/20/96  | Piping and Instrumentation Diagram (P&ID), Washington Left End Station   |

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| D960114-00-V | Richard Bagley              | V049-0-012       | 3/20/96 | Piping and Installation Diagram (P&ID), Washington Left Beam Manifold                                  |
| D960115-00-V | Richard Bagley              | V049-0-013       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Washington Vertex Section                                   |
| D960116-00-V | Richard Bagley              | V049-0-014       | 3/20/96 | Piping and Installation Diagram (P&ID), Washington Diagonal Section                                    |
| D960117-00-V | Richard Bagley              | V049-0-015       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Washington, Right Beam Manifold                             |
| D960118-00-V | Richard Bagley              | V049-0-016       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Washington, Right Mid Station                               |
| D960119-00-V | Richard Bagley              | V049-0-017       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Washington, Right End Station                               |
| D960120-00-V | Richard Bagley              | V049-0-018       | 3/20/96 | Piping and Installation Diagram, Washington, Corner Station Mechanical Room                            |
| D960121-00-V | Richard Bagley              | V049-0-020       | 3/20/96 | Piping and Instrumentation Diagram, Louisiana, Left End Station  |
| D960122-00-V | Richard Bagley              | V049-0-021       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Left and Right Mid Joints                        |
| D960123-00-V | Richard Bagley              | V049-0-022       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Left Beam Manifold                               |
| D960124-00-V | Richard Bagley              | V049-0-023       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Vertex Section                                   |
| D960125-00-V | Process Systems Int'l, Inc. | V049-0-024       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Right Beam Manifold                              |
| D960126-00-D | Janeen Hazel                |                  | 5/23/96 | LED Fixture  |
| D960126-00-V | Richard Bagley              | V049-0-025       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Right End Station                                |
| D960127-00-V | Richard Bagley              | V049-0-026       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), Louisiana, Right End Station                                |
| D960131-00-V | Richard Bagley              | V049-0-011       | 3/20/96 | Piping and Instrumentation Diagram (P&ID), LIGO Vacuum Equipment - Washington, Left Mid Station        |
| D960132-00-D | Janeen Hazel                |                  | 5/23/96 | Large Optic Suspension Assembly (LOS1)   |
| D960133-00-D | Janeen Hazel                |                  | 5/23/96 | Large Optic Suspension Structure Assembly  |
| D960134-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Clamp, Suspension Block  |
| D960135-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Crescent   |
| D960136-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Bracket, Sensor/Actuator, Bottom   |
| D960137-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Bracket, Sensor/Actuator, Top  |
| D960138-00-D | Janeen Hazel                |                  | 5/23/96 | Bracket, Safety Stop, Top, Back  |
| D960139-00-D | Janeen Hazel                |                  | 5/23/96 | Bracket, Safety Stop, Top, Front   |
| D960140-00-D | Janeen Hazel                |                  | 5/23/96 | Bracket, Safety Stop, Bottom   |
| D960141-00-D | Janeen Hazel                |                  | 5/23/96 | Side Sensor/Actuator Plate   |
| D960142-00-D | Janeen Hazel                |                  | 5/23/96 | Bracket, Front, Bottom   |
| D960143-00-D | Janeen Hazel                |                  | 5/23/96 | Bracket, Front, Top  |
| D960144-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Suspension Block   |
| D960145-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Height Adapter Assembly  |
| D960146-00-D | Janeen Hazel                |                  | 5/23/96 | Guide Rod  |
| D960147-00-D | Janeen Hazel                |                  | 5/23/96 | Guide Rod Fixture  |
| D960148-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Suspension Screw   |
| D960149-00-D | Janeen Hazel                |                  | 5/23/96 | LOS Side Standoff  |
| D960151-00-O | Arthur Theis                |                  | 3/13/96 | LIGO Project Topographic Survey, Livingston  |
| D960152-00-O | Arthur Theis                |                  | 3/13/96 | LIGO Project Topographic Survey, Cross Sections, Livingston  |
| D960157-A-E  | Craig Conley                |                  | 4/1/96  | Stay Clear Zones for Inter-Station Buried Cable and Future Building Expansion                          |
| D960159-00-D | Janeen Hazel                |                  | 5/23/96 | SOS Dummy Mass   |
| D960160-00-O | Ralph M. Parsons Company    | BT-G-001         | 3/25/96 | General Cover Sheet - BTE Sitework & Fabrication - Hanford   |
| D960161-01-O | Ralph M. Parsons Company    | BT-C-001, Rev. 1 | 3/25/96 | Civil, Drawing Index, Location and Vicinity Maps - BTE Sitework & Fabrication - Hanford                |
| D960162-01-O | Ralph M. Parsons Company    | BT-C-002, Rev. 1 | 3/25/96 | Civil, General Notes, Legends and Abbreviations - BTE Sitework & Fabrication - Hanford                 |
| D960163-01-O | Ralph M. Parsons Company    | BT-C-003, Rev. 1 | 3/25/96 | Civil, Drawing Matrix - BTE Sitework & Fabrication - Hanford   |
| D960164-01-O | Ralph M. Parsons Company    | BT-C-004, Rev. 1 | 3/25/96 | Civil, Typical Sections and Details - BTE Sitework & Fabrication - Hanford                             |
| D960165-01-O | Ralph M. Parsons Company    | BT-C-005, Rev. 1 | 3/25/96 | Civil, Corner Station Plan - BTE Sitework & Fabrication - Hanford.                                     |
| D960166-01-O | Ralph M. Parsons Company    | BT-C-011, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 0+00 to STA 14+00 - BTE Sitework & Fabrication - Hanford    |
| D960167-01-O | Ralph M. Parsons Company    | BT-C-012, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 14+00 to STA 28+00 - BTE Sitework & Fabrication - Hanford   |
| D960168-01-O | Ralph M. Parsons Company    | BT-C-013, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 28+00 to STA 42+00 - BTE Sitework & Fabrication - Hanford   |
| D960169-01-O | Ralph M. Parsons Company    | BT-C-014, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 42+00 to STA 56+00 - BTE Sitework & Fabrication - Hanford   |
| D960170-01-O | Ralph M. Parsons Company    | BT-C-015, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 56+00 to STA 70+00 - BTE Sitework & Fabrication - Hanford   |
| D960171-01-O | Ralph M. Parsons Company    | BT-C-016, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 70+00 to STA 84+00 - BTE Sitework & Fabrication - Hanford   |
| D960172-01-O | Ralph M. Parsons Company    | BT-C-017, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 84+00 to STA 98+00 - BTE Sitework & Fabrication - Hanford   |
| D960173-01-O | Ralph M. Parsons Company    | BT-C-018, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 98+00 to STA 112+00 - BTE Sitework & Fabrication - Hanford  |
| D960174-01-O | Ralph M. Parsons Company    | BT-C-019, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 112+00 to STA 126+00 - BTE Sitework & Fabrication - Hanford |
| D960175-01-O | Ralph M. Parsons Company    | BT-C-020, Rev. 1 | 3/25/96 | Civil, Northwest Arm Plan and Profile, STA 126+00 to STA 133+00 - BTE Sitework & Fabrication - Hanford |
| D960176-01-O | Ralph M. Parsons Company    | BT-C-031, Rev. 1 | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 0+00 to STA 14+00 - BTE Sitework & Fabrication - Hanford    |
| D960177-01-O | Ralph M. Parsons Company    | BT-C-032, Rev. 1 | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 14+00 to STA 28+00 - BTE Sitework & Fabrication - Hanford   |
| D960178-01-O | Ralph M. Parsons Company    | BT-C-033, Rev. 1 | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 28+00 to STA 42+00 - BTE Sitework & Fabrication - Hanford   |



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| D960179-01-O | Ralph M. Parsons Company | BT-C-034, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 42+00 to STA 56+00 - BTE Sitework & Fabrication - Hanford                          |
| D960180-01-O | Ralph M. Parsons Company | BT-C-035, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 56+00 to STA 70+00 - BTE Sitework & Fabrication - Hanford                          |
| D960181-01-O | Ralph M. Parsons Company | BT-C-036, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 70+00 to STA 84+00 - BTE Sitework & Fabrication - Hanford                          |
| D960182-01-O | Ralph M. Parsons Company | BT-C-037, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 84+00 to STA 98+00 - BTE Sitework and Fabrication - Hanford                        |
| D960183-01-O | Ralph M. Parsons Company | BT-C-038, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 98+00 to STA 112+00 - BTE Sitework and Fabrication - Hanford                       |
| D960184-01-O | Ralph M. Parsons Company | BT-C-039, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 112+00 to STA 126+00 - BTE Sitework and Fabrication - Hanford                      |
| D960185-01-O | Ralph M. Parsons Company | BT-C-040, Rev. 1  | 3/25/96 | Civil, Southwest Arm Plan and Profile, STA 126+00 to STA 133+00 - BTE Sitework and Fabrication - Hanford                      |
| D960186-00-O | Ralph M. Parsons Company | BT-S-001, Rev. 0  | 3/27/96 | Structural, General Notes, Abbreviations and Legend - BTE Sitework and Fabrication, Hanford                                   |
| D960187-01-O | Ralph M. Parsons Company | BT-S-002, Rev. 1  | 3/27/96 | Structural, Key Plan of Beam Tube Enclosure (BTE) and Partial Enlarged Plan - BTE Sitework and Fabrication - Hanford          |
| D960188-00-O | Ralph M. Parsons Company | BT-S-002A, Rev. 0 | 3/27/96 | Structural, Key Plan of Beam Tube Enclosure (BTE) and Partial Enlarged Plan - BTE Sitework and Fabrication - Hanford          |
| D960189-01-O | Ralph M. Parsons Company | BT-S-003, Rev. 1  | 3/27/96 | Structural, Beam Tube Enclosure (BTE) Plans, Sections and Details - BTE Sitework and Fabrication - Hanford                    |
| D960190-01-O | Ralph M. Parsons Company | BT-S-004, Rev. 1  | 3/27/96 | Structural, Key Plan of Beam Tube Enclosure (BTE) FDN and Partial Enlarged Plans - BTE Sitework and Fabrication - Hanford     |
| D960191-01-O | Ralph M. Parsons Company | BT-S-005, Rev. 1  | 3/27/96 | Structural, Beam Tube Enclosure (BTE) Sections and Details, Sheet 1 - BTE Sitework and Fabrication - Hanford                  |
| D960192-00-O | Ralph M. Parsons Company | BT-S-006, Rev. 0  | 3/27/96 | Structural, Beam Tube Enclosure (BTE) Sections and Details, Sheet 2 - BTE Sitework and Fabrication - Hanford                  |
| D960193-00-O | Ralph M. Parsons Company | WA-G-001          | 4/8/96  | General, Cover and Drawing Index, Sheet 1.  |
| D960194-00-O | Ralph M. Parsons Company | WA-G-002          | 4/12/96 | General, Drawing Index, Sheet 2.  |
| D960195-00-O | Ralph M. Parsons Company | WA-G-003          | 4/12/96 | General, Drawing Index, Sheet 3.  |
| D960196-00-O | Ralph M. Parsons Company | WA-C-001          | 4/12/96 | Civil, Drawing Index Location & Vicinity Maps..   |
| D960197-00-O | Ralph M. Parsons Company | WA-C-002          | 4/12/96 | Civil, General Notes, Legend & Abbreviations.   |
| D960198-00-O | Ralph M. Parsons Company | WA-C-003          | 4/12/96 | Civil, Drawing Matrix.  |
| D960199-00-O | Ralph M. Parsons Company | WA-C-004          | 4/12/96 | Civil, Typical Sections, Details.   |
| D960200-00-O | Ralph M. Parsons Company | WA-C-006, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Plot Plans, Enlarged Plans.                        |
| D960201-00-O | Ralph M. Parsons Company | WA-C-008, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Grading Plans, Enlarged Plans.                     |
| D960202-00-O | Ralph M. Parsons Company | WA-C-011, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 0+00 to Station 14+00.    |
| D960203-00-O | Ralph M. Parsons Company | WA-C-012, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 14+00 to Station 28+00.   |
| D960204-00-O | Ralph M. Parsons Company | WA-C-013, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 28+00 to Station 42+00.   |
| D960205-00-O | Ralph M. Parsons Company | WA-C-014, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 42+00 to Station 56+00.   |
| D960206-00-O | Ralph M. Parsons Company | WA-C-015, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 56+00 to Station 70+00.   |
| D960207-00-O | Ralph M. Parsons Company | WA-C-016, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 70+00 to Station 84+00.   |
| D960208-00-O | Ralph M. Parsons Company | WA-C-017, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil Northwest Arm, Plan and Profile, Station 84+00 to Station 98+00.    |
| D960209-00-O | Ralph M. Parsons Company | WA-C-018, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 98+00 to Station 112+00.  |
| D960210-00-O | Ralph M. Parsons Company | WA-C-019, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Plan and Profile, Station 112+00 to Station 126+00. |
| D960211-00-O | Ralph M. Parsons Company | WA-C-020, Rev. 0  | 4/12/96 | Hanford Facility Drawings Issued for Construction - General, Cover and Drawing Index, Sheet 1.                                |
| D960212-00-O | Ralph M. Parsons Company | WA-C-021, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Mid-Station, Plot Plan.                             |
| D960212-C-O  | Ralph M. Parsons Company | WA-C-021, Rev. C  | 5/22/96 | Civil Northwest Arm Mid-Station Plot Plan - Hanford.  |
| D960213-00-O | Ralph M. Parsons Company | WA-C-022, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Mid-Station, Grading Plan.                          |
| D960214-00-O | Ralph M. Parsons Company | WA-C-023, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, Mid-Station, Utility Plan.                          |
| D960215-00-O | Ralph M. Parsons Company | WA-C-025, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, End-Station, Plot Plan.                             |
| D960215-B-O  | Ralph M. Parsons Company | WA-C-025, Rev. B  | 5/22/96 | Civil Northwest Arm End-Station Plot Plan - Hanford.  |
| D960216-00-O | Ralph M. Parsons Company | WA-C-026, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, End-Station, Grading Plan.                          |
| D960217-00-O | Ralph M. Parsons Company | WA-C-027, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Northwest Arm, End-Station, Utility Plan.                          |
| D960218-00-O | Ralph M. Parsons Company | WA-C-031, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 0+00 to 14+00.            |
| D960219-00-O | Ralph M. Parsons Company | WA-C-032, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 14+00 to 28+00.           |
| D960219-B-O  | Ralph M. Parsons Company | WA-C-032, REV. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 14+00 to STA 28+00 - Hanford.  |
| D960220-00-O | Ralph M. Parsons Company | WA-C-033, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 28+00 to Station 42+00.   |
| D960220-B-O  | Ralph M. Parsons Company | WA-C-033, Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 28+00 To 42+00 - Hanford   |
| D960221-00-O | Ralph M. Parsons Company | WA-C-034, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 42+00 to Station 56+00.   |
| D960221-B-O  | Ralph M. Parsons Company | WA-C-034 Rev. B   | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 42+00 To 56+00 - Hanford   |
| D960222-00-O | Ralph M. Parsons Company | WA-C-035, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 56+00 to Station 70+00.   |
| D960222-B-O  | Ralph M. Parsons Company | WA-C-035, Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 56+00 To 70+00 - Hanford   |
| D960223-00-O | Ralph M. Parsons Company | WA-C-036, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 70+00 TO Station 84+00.   |
| D960223-B-O  | Ralph M. Parsons Company | WA-C-036, Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 70+00 To STA 84+00 - Hanford   |
| D960224-00-O | Ralph M. Parsons Company | WA-C-037, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 84+00 to Station 98+00.   |
| D960224-B-O  | Ralph M. Parsons Company | WA-C-037, Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 84+00 To STA 98+00 - Hanford   |
| D960225-00-O | Ralph M. Parsons Company | WA-C-038, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 98+00 to 112+00.          |
| D960225-B-O  | Ralph M. Parsons Company | WA-C-038, Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 98+00 TO STA 112+00 - Hanford  |
| D960226-00-O | Ralph M. Parsons Company | WA-C-039, Rev. 0  | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 112+00 to Station 126+00. |

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| D960226-B-O  | Ralph M. Parsons Company | WA-C-039 Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 112+00 TO STA 126+00 - Hanford  |
| D960227-00-O | Ralph M. Parsons Company | WA-C-040, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Plan and Profile, Station 126+00 to Station 133+00.    |
| D960227-B-O  | Ralph M. Parsons Company | WA-C-040 Rev. B  | 4/19/96 | Civil, Southwest Arm, Plan and Profile STA 126+00 TO STA 133+00 - Hanford  |
| D960228-00-O | Ralph M. Parsons Company | WA-C-040, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Mid-Station, Plot Plan.                                |
| D960228-B-O  | Ralph M. Parsons Company | WA-C-041 Rev. B  | 4/19/96 | Civil, Southwest Arm, Mid-Station, Plot Plan - Hanford   |
| D960229-00-O | Ralph M. Parsons Company | WA-C-042, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Mid-Station, Grading Plan.                             |
| D960229-B-O  | Ralph M. Parsons Company | WA-C-042 Rev. B  | 4/19/96 | Civil, Southwest Arm, Mid-Station, Grading Plan - Hanford  |
| D960230-00-O | Ralph M. Parsons Company | WA-C-043, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, Mid-Station, Utility Plan.                             |
| D960230-B-O  | Ralph M. Parsons Company | WA-C-043 Rev. B  | 4/19/96 | Civil, Southwest Arm, Mid-Station, Utility Plan - Hanford  |
| D960231-00-O | Ralph M. Parsons Company | WA-C-045, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, End-Station, Plot Plan.                                |
| D960231-A-O  | Ralph M. Parsons Company | WA-C-045, Rev. A | 4/19/96 | Civil, Southwest Arm, End-Station, Plot Plan - Hanford   |
| D960232-00-O | Ralph M. Parsons Company | WA-C-046, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, End-Station, Grading Plan.                             |
| D960232-A-O  | Ralph M. Parsons Company | WA-C-046, Rev. A | 4/19/96 | Civil, Southwest Arm, End-Station, Grading Plan- Hanford   |
| D960233-00-O | Ralph M. Parsons Company | WA-C-047, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Southwest Arm, End-Station, Utility Plan.                             |
| D960233-A-O  | Ralph M. Parsons Company | WA-C-047, Rev. A | 4/19/96 | Civil, Southwest Arm, End-Station, Utility Plan - Hanford  |
| D960234-00-O | Ralph M. Parsons Company | WA-C-050, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, LIGO Access Road, Plan and Profile.                                   |
| D960234-B-O  | Ralph M. Parsons Company | WA-C-050 Rev. B  | 4/19/96 | Civil, LIGO Access Road, Plan and Profile - Hanford  |
| D960235-00-O | Ralph M. Parsons Company | WA-C-051, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Sitework Details, Sheet 1.  |
| D960235-A-O  | Ralph M. Parsons Company | WA-C-051, Rev. A | 4/19/96 | Civil, Sitework Details, Sheet 1 - Hanford   |
| D960236-00-O | Ralph M. Parsons Company | WA-C-052, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Sitework Details, Sheet 2.  |
| D960236-A-O  | Ralph M. Parsons Company | WA-C-052, Rev. A | 4/19/96 | Civil, Sitework Details, Sheet 2 - Hanford   |
| D960236-B-O  | Ralph M. Parsons Company | WA-C-052, Rev. B | 5/22/96 | Civil Sitework Details Sheet 2 - Hanford.  |
| D960237-00-O | Ralph M. Parsons Company | WA-C-053, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Grading Sections, Details, Sheet 1.                                   |
| D960237-A-O  | Ralph M. Parsons Company | WA-C-053, Rev. A | 4/19/96 | Civil, Grading Sections & Details, Sheet 1 - Hanford   |
| D960238-00-O | Ralph M. Parsons Company | WA-C-054, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Grading Sections, Details, Sheet 2.                                   |
| D960238-A-O  | Ralph M. Parsons Company | WA-C-054, Rev. A | 4/19/96 | Civil, Grading Sections & Details, Sheet 2 - Hanford   |
| D960239-00-O | Ralph M. Parsons Company | WA-C-055, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Utility Details, Sheet 1.   |
| D960239-A-O  | Ralph M. Parsons Company | WA-C-055, Rev. A | 4/19/96 | Civil, Utility Details, Sheet 1 - Hanford  |
| D960240-00-O | Ralph M. Parsons Company | WA-C-056, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Utility Detail, Sheet 2.  |
| D960240-A-O  | Ralph M. Parsons Company | WA-C-056, Rev. A | 4/19/96 | Civil, Utility Details, Sheet 2 - Hanford  |
| D960241-00-O | Ralph M. Parsons Company | WA-C-505, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Plot Plan.  |
| D960241-A-O  | Ralph M. Parsons Company | WA-C-505, Rev. A | 4/19/96 | Civil, Corner Station, Plot Plan - Hanford   |
| D960242-00-O | Ralph M. Parsons Company | WA-C-507, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Grading Plan.   |
| D960242-A-O  | Ralph M. Parsons Company | WA-C-507, Rev. A | 4/19/96 | Civil, Corner Station, Grading Plan - Hanford  |
| D960243-00-O | Ralph M. Parsons Company | WA-C-509, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Utility Plan.   |
| D960243-A-O  | Ralph M. Parsons Company | WA-C-509         | 4/19/96 | Civil, Corner Station, Utility Plan - Hanford  |
| D960244-00-O | Ralph M. Parsons Company | WA-C-510, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Civil, Corner Station, Utility Plans, Enlarged Plans.                        |
| D960244-A-O  | Ralph M. Parsons Company | WA-C-510, Rev. A | 4/19/96 | Civil, Corner Station, Utility Plan, Enlarged Plans - Hanford  |
| D960245-00-O | Ralph M. Parsons Company | WA-A-001, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Legend, Symbols, Abbreviations.                               |
| D960245-A-O  | Ralph M. Parsons Company | WA-A-001 Rev. A  | 4/19/96 | Architectural, Legend, Symbols & Abbreviations - Hanford   |
| D960246-00-O | Ralph M. Parsons Company | WA-A-002, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, General Notes, Life Safety Plan.                              |
| D960246-B-O  | Ralph M. Parsons Company | WA-A-002 Rev. B  | 4/19/96 | Architectural, General Notes & Life Safety Plan - Hanford  |
| D960247-00-O | Ralph M. Parsons Company | WA-A-107, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Floor Plan.                              |
| D960247-B-O  | Ralph M. Parsons Company | WA-A-107 Rev. B  | 4/19/96 | Architectural, Corner Station, OSB Floor Plan - Hanford  |
| D960248-00-O | Ralph M. Parsons Company | WA-A-108, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Partial Floor Plan, Sheet 1.             |
| D960249-00-O | Ralph M. Parsons Company | WA-A-109, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Partial Floor Plan, Sheet 2.             |
| D960249-A-O  | Ralph M. Parsons Company | WA-A-109 Rev. A  | 4/19/96 | Architectural, Corner Station, OSB Partial Floor Plan, Sheet 2 - Hanford   |
| D960250-00-O | Ralph M. Parsons Company | WA-A-111, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Enlarged Plans.                          |
| D960250-B-O  | Ralph M. Parsons Company | WA-A-111 Rev. B  | 4/19/96 | Architectural, Corner Station, OSB Enlarged Plans - Hanford  |
| D960251-00-O | Ralph M. Parsons Company | WA-A-112, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, Maintenance Building Plans.                   |
| D960251-B-O  | Ralph M. Parsons Company | WA-A-112 Rev. B  | 4/19/96 | Architectural, Corner Station, Maintenance Building Plans - Hanford  |
| D960252-00-O | Ralph M. Parsons Company | WA-A-122, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Partial Reflected Ceiling Plan, Sheet 1. |
| D960252-B-O  | Ralph M. Parsons Company | WA-A-122 Rev. B  | 4/19/96 | Architectural, Corner Station, OSB Partial Reflected Ceiling Plan, Sheet 1 - Hanford   |
| D960253-00-O | Ralph M. Parsons Company | WA-A-123, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Partial Reflected Ceiling Plan, Sheet 2. |
| D960253-B-O  | Ralph M. Parsons Company | WA-A-123 Rev. B  | 4/19/96 | Architectural, Corner Station, OSB Partial Reflected Ceiling Plan, Sheet 2 - Hanford   |
| D960254-00-O | Ralph M. Parsons Company | WA-A-132, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, OSB, Roof Plan.                               |
| D960254-B-O  | Ralph M. Parsons Company | WA-A-132 Rev. B  | 4/19/96 | Architectural, Corner Station, OSB Roof Plan - Hanford   |

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| D960255-00-O | Ralph M. Parsons Company | WA-A-143, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, Maintenance Building, Elevations, Sections. |
| D960255-B-O  | Ralph M. Parsons Company | WA-A-143 Rev. B  | 4/19/96 | Architectural, Corner Station, Maintenance, Building Elevations/Sections - Hanford   |
| D960256-00-O | Ralph M. Parsons Company | WA-A-161, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, Wall Sections, Sheet 1.                     |
| D960256-B-O  | Ralph M. Parsons Company | WA-A-161 Rev. B  | 4/19/96 | Architectural, Corner Station, Wall Sections, Sheet 1 - Hanford  |
| D960257-00-O | Ralph M. Parsons Company | WA-A-162, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, Wall Section, Sheet 2.                      |
| D960257-B-O  | Ralph M. Parsons Company | WA-A-162 Rev. B  | 4/19/96 | Architectural, Corner Station, Wall Section, Sheet 2 - Hanford   |
| D960258-00-O | Ralph M. Parsons Company | WA-A-163, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Corner Station, Wall Sections, Sheet 3.                     |
| D960258-B-O  | Ralph M. Parsons Company | WA-A-163 Rev. B  | 4/19/96 | Architectural, Corner Station, Wall Sections, Sheet 3 - Hanford  |
| D960259-00-O | Ralph M. Parsons Company | WA-A-201, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Mid Stations, Floor Plans.                                  |
| D960259-B-O  | Ralph M. Parsons Company | WA-A-201 Rev. B  | 4/19/96 | Architectural, Mid Stations, Floor Plans - Hanford   |
| D960260-00-O | Ralph M. Parsons Company | WA-A-202, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, End Stations, Floor Plans.                                  |
| D960260-B-O  | Ralph M. Parsons Company | WA-A-202 Rev. B  | 4/19/96 | Architectural, End Stations, Floor Plans - Hanford   |
| D960261-00-O | Ralph M. Parsons Company | WA-A-221, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Mid and End Stations, Reflected Ceiling Plan, Roof Plan.    |
| D960261-B-O  | Ralph M. Parsons Company | WA-A-221 Rev. B  | 4/19/96 | Architectural, Mid & End Stations, Reflected Ceiling Plan & Roof Plan - Hanford  |
| D960262-00-O | Ralph M. Parsons Company | WA-A-241, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Mid and End Stations, Building Elevations.                  |
| D960262-B-O  | Ralph M. Parsons Company | WA-A-241 Rev. B  | 4/19/96 | Architectural, Mid & End Stations, Building Elevations - Hanford   |
| D960263-00-O | Ralph M. Parsons Company | WA-A-251, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Mid and End Stations, Building Sections.                    |
| D960263-B-O  | Ralph M. Parsons Company | WA-A-251 Rev. B  | 4/19/96 | Architectural, Mid & End Stations, Building Sections - Hanford   |
| D960264-00-O | Ralph M. Parsons Company | WA-A-261, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Mid and End Stations, Wall Sections.                        |
| D960264-B-O  | Ralph M. Parsons Company | WA-A-261 Rev. B  | 4/19/96 | Architectural, Mid & End Stations, Wall Sections - Hanford   |
| D960265-00-O | Ralph M. Parsons Company | WA-A-421, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Exterior, Wall Details.                                     |
| D960265-B-O  | Ralph M. Parsons Company | WA-A-421 Rev. B  | 4/19/96 | Architectural, Exterior Wall Details- Hanford  |
| D960266-00-O | Ralph M. Parsons Company | WA-A-422, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Interior, Wall Details.                                     |
| D960266-B-O  | Ralph M. Parsons Company | WA-A-422 Rev. B  | 4/19/96 | Architectural, Interior Wall Details - Hanford   |
| D960267-00-O | Ralph M. Parsons Company | WA-A-423, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Window and Louver Details.                                  |
| D960267-B-O  | Ralph M. Parsons Company | WA-A-423 Rev. B  | 4/19/96 | Architectural, Window & Louver Details - Hanford   |
| D960268-00-O | Ralph M. Parsons Company | WA-A-424, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Ceiling and Miscellaneous Interior Details.                 |
| D960268-B-O  | Ralph M. Parsons Company | WA-A-424 Rev. B  | 4/19/96 | Architectural, Ceiling & Miscellaneous Interior Details - Hanford  |
| D960269-00-O | Ralph M. Parsons Company | WA-A-425, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Roof, Miscellaneous Exterior Details.                       |
| D960269-B-O  | Ralph M. Parsons Company | WA-A-425 Rev. B  | 4/19/96 | Architectural, Roof & Miscellaneous Exterior Details - Hanford   |
| D960270-00-O | Ralph M. Parsons Company | WA-A-426, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Door Details.   |
| D960270-B-O  | Ralph M. Parsons Company | WA-A-426 Rev. B  | 4/19/96 | Architectural, Door Details - Hanford  |
| D960271-00-O | Ralph M. Parsons Company | WA-A-427, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued for Construction - Architectural, Interior, Elevations, Miscellaneous Details.                |
| D960271-B-O  | Ralph M. Parsons Company | WA-A-427 Rev. B  | 4/19/96 | Architectural, Interior Elevations & Miscellaneous Details - Hanford   |
| D960272-00-O | Ralph M. Parsons Company | WA-A-428, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Wall Type, Schedules.                                       |
| D960272-B-O  | Ralph M. Parsons Company | WA-A-428 Rev. B  | 4/19/96 | Architectural, Wall Types Schedule - Hanford   |
| D960273-00-O | Ralph M. Parsons Company | WA-A-501, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Floor Plan.                           |
| D960273-A-O  | Ralph M. Parsons Company | WA-A-501, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Floor Plan - Hanford   |
| D960274-00-O | Ralph M. Parsons Company | WA-A-502, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 1.          |
| D960274-A-O  | Ralph M. Parsons Company | WA-A-502, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 1 - Hanford  |
| D960275-00-O | Ralph M. Parsons Company | WA-A-503, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 2.          |
| D960275-A-O  | Ralph M. Parsons Company | WA-A-503, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 2 - Hanford  |
| D960276-00-O | Ralph M. Parsons Company | WA-A-504, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 3.          |
| D960276-A-O  | Ralph M. Parsons Company | WA-A-504, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 3 - Hanford  |
| D960277-00-O | Ralph M. Parsons Company | WA-A-505, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 4.          |
| D960277-A-O  | Ralph M. Parsons Company | WA-A-505, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 4 - Hanford  |
| D960278-00-O | Ralph M. Parsons Company | WA-A-510, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, Roof Platform Plan.                         |
| D960278-A-O  | Ralph M. Parsons Company | WA-A-510, Rev. A | 4/19/96 | Architectural, Corner Station, Roof Platform Plan - Hanford  |
| D960279-00-O | Ralph M. Parsons Company | WA-A-521, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Reflected Ceiling Plan.               |
| D960279-A-O  | Ralph M. Parsons Company | WA-A-521, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Reflected Ceiling Plan - Hanford   |
| D960280-00-O | Ralph M. Parsons Company | WA-A-531, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, Roof Plan.                            |
| D960280-A-O  | Ralph M. Parsons Company | WA-A-531, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA Roof Plan - Hanford  |
| D960281-00-O | Ralph M. Parsons Company | WA-A-541, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, OSB, Elevations, Sheet 1.             |
| D960281-A-O  |                          | WA-A-541, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA & OSB Elevations, Sheet 1 - Hanford  |
| D960282-00-O | Ralph M. Parsons Company | WA-A-542, Rev. 0 | 6/24/96 | Hanford Facility Drawings Issued For Construction - Architectural, Corner Station, LVEA, OSB, Elevations, Sheet 2.             |
| D960282-A-O  | Ralph M. Parsons Company | WA-A-542, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA & OSB Elevations, Sheet 2 - Hanford  |
| D960283-A-O  | Ralph M. Parsons Company | WA-A-551, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 1 - Hanford  |

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| D960284-A-O | Ralph M. Parsons Company | WA-A-552, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 2 - Hanford                 |
| D960285-A-O | Ralph M. Parsons Company | WA-A-553, Rev. A | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 3 - Hanford                 |
| D960286-B-O | Ralph M. Parsons Company | WA-S-001 Rev. B  | 4/19/96 | Structural, General Notes, Abbreviations & Legend - Hanford                           |
| D960287-B-O | Ralph M. Parsons Company | WA-S-002 Rev. B  | 4/19/96 | Structural, Standard Concrete Details, Sheet 1 - Hanford                              |
| D960288-B-O | Ralph M. Parsons Company | WA-S-003 Rev. B  | 4/19/96 | Structural, Standard Concrete Details, Sheet 2 - Hanford                              |
| D960289-B-O | Ralph M. Parsons Company | WA-S-004 Rev. B  | 4/19/96 | Structural, Standard Structural Steel, Connection Details, Sheet 1 - Hanford          |
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| D960294-B-O | Ralph M. Parsons Company | WA-S-009 Rev. B  | 4/19/96 | Structural, Standard Structural Steel, Stair & Handrail Details - Hanford             |
| D960295-A-O | Ralph M. Parsons Company | WA-S-010, Rev. A | 4/19/96 | Structural, Key Plan - Hanford  |
| D960296-B-O | Ralph M. Parsons Company | WA-S-102 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Foundation Plan - Hanford                             |
| D960297-B-O | Ralph M. Parsons Company | WA-S-117 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Roof Framing Plans - Hanford                          |
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| D960299-B-O | Ralph M. Parsons Company | WA-S-119 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Framing, Elevations, Sheet 2 - Hanford                |
| D960300-B-O | Ralph M. Parsons Company | WA-S-120 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Framing, Elevations, Sheet 3 - Hanford                |
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| D960302-B-O | Ralph M. Parsons Company | WA-S-122 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Framing, Elevations, Sheet 5 - Hanford                |
| D960303-B-O | Ralph M. Parsons Company | WA-S-123 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Framing, Elevations, Sheet 6 - Hanford                |
| D960304-B-O | Ralph M. Parsons Company | WA-S-124 Rev. B  | 4/19/96 | Structural, Corner Station, OSB Framing, Elevation, Sheet 3 - Hanford                 |
| D960305-B-O | Ralph M. Parsons Company | WA-S-125 Rev. B  | 4/19/96 | Structural, Maintenance, Building, Framing Plans & Elevations - Hanford               |
| D960306-B-O | Ralph M. Parsons Company | WA-S-201 Rev. B  | 4/19/96 | Structural, Mid Station "A" & End Station "A" Foundation Plans - Hanford              |
| D960308-A-O | Ralph M. Parsons Company | WA-S-202, Rev. A | 4/19/96 | Structural, Mid & End Stations, Air Handling Unit, Enclosure Plans - Hanford          |
| D960309-A-O | Ralph M. Parsons Company | WA-S-203, Rev. A | 4/19/96 | Structural, Mid & End Stations, Air Handling Unit, Enclosure, Elevs & Sects - Hanford |
| D960310-B-O | Ralph M. Parsons Company | WA-S-204 Rev. B  | 4/19/96 | Structural, Mid & End Stations, "A" Roof & Crane Girder Framing Plans - Hanford       |
| D960311-B-O | Ralph M. Parsons Company | WA-S-205 Rev. B  | 4/19/96 | Structural, Mid & End Stations, Framing Elevations, Sheet 1 - Hanford                 |
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| D960315-A-O | Ralph M. Parsons Company | WA-S-209, Rev. A | 4/19/96 | Structural, Mid & End Stations, "B" Roof & Crane Girder, Framing Plans - Hanford      |
| D960316-A-O |                          | WA-S-401, Rev. A | 4/19/96 | Structural, Mid & End Station, Foundation, Schedule and Details - Hanford             |
| D960317-A-O | Ralph M. Parsons Company | WA-S-402, Rev. A | 4/19/96 | Structural, Corner Station, OSB Foundation, Schedule & Details, Sheet 1 - Hanford     |
| D960318-A-O | Ralph M. Parsons Company | WA-S-403, Rev. A | 4/19/96 | Structural, Corner Station, OSB Foundation, Schedule & Details, Sheet 2 - Hanford     |
| D960319-A-O | Ralph M. Parsons Company | WA-S-405, Rev. A | 4/19/96 | Structural, Foundation Sections & Details, Sheet 1 - Hanford                          |
| D960320-A-O | Ralph M. Parsons Company | WA-S-406, Rev. A | 4/19/96 | Structural, Foundation Sections & Details, Sheet 2 - Hanford                          |
| D960321-A-O | Ralph M. Parsons Company | WA-S-407, Rev. A | 4/19/96 | Structural, Steel Sections & Details - Hanford  |
| D960322-A-O | Ralph M. Parsons Company | WA-S-501, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Foundation Plan - Hanford                            |
| D960323-A-O | Ralph M. Parsons Company | WA-S-502, Rev. A | 4/19/96 | Structural, Corner Station, Air Handling Unit, Enclosure Plan - Hanford               |
| D960324-A-O | Ralph M. Parsons Company | WA-S-503, Rev. A | 4/19/96 | Structural, Corner Station, Air Handling Unit, Enclosure Elevs & Sects - Hanford      |
| D960325-A-O | Ralph M. Parsons Company | WA-S-504, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Roof Framing Plan - Hanford                          |
| D960326-A-O | Ralph M. Parsons Company | WA-S-505, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Truss Bottom Chord, Framing Plan - Hanford           |
| D960327-A-O | Ralph M. Parsons Company | WA-S-506, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Crane Support Framing Plan - Hanford                 |
| D960328-A-O | Ralph M. Parsons Company | WA-S-507, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 1 - Hanford               |
| D960329-A-O | Ralph M. Parsons Company | WA-S-508, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 2 - Hanford               |
| D960330-A-O | Ralph M. Parsons Company | WA-S-509, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 3 - Hanford               |
| D960331-A-O | Ralph M. Parsons Company | WA-S-510, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 4 - Hanford               |
| D960332-A-O | Ralph M. Parsons Company | WA-S-511, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 5 - Hanford               |
| D960333-A-U | Ralph M. Parsons Company | WA-S-512, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 6 - Hanford               |
| D960334-A-O | Ralph M. Parsons Company | WA-S-513, Rev. A | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 7 - Hanford               |
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| D960341-A-O | Ralph M. Parsons Company | WA-S-520, Rev. A | 4/19/96 | Structural, Corner Station, Foundation Sections and Details - Hanford                 |

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| D960342-A-O | Ralph M. Parsons Company | WA-S-521, Rev. A | 4/19/96 | Structural, Corner Station, Steel Sections and Details - Hanford                                     |
| D960343-B-O | Ralph M. Parsons Company | WA-H-001, Rev. B | 4/19/96 | HVAC, Legend & Abbreviations - Hanford   |
| D960344-B-O | Ralph M. Parsons Company | WA-H-002, Rev. B | 4/19/96 | HVAC, Legend & General Notes - Hanford   |
| D960345-B-O | Ralph M. Parsons Company | WA-H-003, Rev. B | 4/19/96 | HVAC, Equipment Schedules, Sheet 1 - Hanford   |
| D960346-B-O | Ralph M. Parsons Company | WA-H-004, Rev. B | 4/19/96 | HVAC, Equipment Schedules, Sheet 2 - Hanford   |
| D960347-B-O | Ralph M. Parsons Company | WA-H-005, Rev. B | 4/19/96 | HVAC, Equipment Schedules, Sheet 3 - Hanford   |
| D960348-A-O | Ralph M. Parsons Company | WA-H-006, Rev. A | 4/19/96 | HVAC, Equipment Schedules, Sheet 4 - Hanford   |
| D960349-A-O | Ralph M. Parsons Company | WA-H-007, Rev. A | 4/19/96 | HVAC, Control System Diagram - Hanford   |
| D960350-B-O | Ralph M. Parsons Company | WA-H-113, Rev. B | 4/19/96 | HVAC, Corner Station, OSB Floor Plan, Sheet 1 - Hanford  |
| D960351-B-O | Ralph M. Parsons Company | WA-H-114, Rev. B | 4/19/96 | HVAC, Corner Station, OSB Floor Plan, Sheet 2 - Hanford  |
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| D960354-B-O | Ralph M. Parsons Company | WA-H-121, Rev. B | 4/19/96 | HVAC, Corner Station, Chilled Water Flow Diagram - Hanford   |
| D960355-B-O | Ralph M. Parsons Company | WA-H-122, Rev. B | 4/19/96 | HVAC, Corner Station, Air Flow Diagrams, Sheet 1 - Hanford   |
| D960356-A-O | Ralph M. Parsons Company | WA-H-123, Rev. A | 4/19/96 | HVAC, Corner Station, Air Flow Diagram, Sheet 2 - Hanford  |
| D960357-A-O | Ralph M. Parsons Company | WA-H-141, Rev. A | 4/19/96 | HVAC, Corner Station, Sequences of Operation & I/O Summary, Sheet 1 - Hanford.                       |
| D960358-A-O | Ralph M. Parsons Company | WA-H-142, Rev. A | 4/19/96 | HVAC, Corner Station, Sequences of Operation & I/O Summary, Sheet 2 - Hanford                        |
| D960359-A-O | Ralph M. Parsons Company | WA-H-153, Rev. A | 4/19/96 | HVAC, Corner Station Sections, Sheet 3 - Hanford   |
| D960360-B-O | Ralph M. Parsons Company | WA-H-211, Rev. B | 4/19/96 | HVAC, Mid & End Stations, "A" Floor Plan - Hanford   |
| D960361-A-O | Ralph M. Parsons Company | WA-H-212, Rev. A | 4/19/96 | HVAC, Mid & End Stations, "B" Floor Plan - Hanford   |
| D960362-A-O | Ralph M. Parsons Company | WA-H-213, Rev. A | 4/19/96 | HVAC, Mid & End Stations, "A" Chillers Yard Plan - Hanford   |
| D960363-A-O | Ralph M. Parsons Company | WA-H-214, Rev. A | 4/19/96 | HVAC, Mid & End Station, "B" Chillers Yard Plan - Hanford  |
| D960364-A-O | Ralph M. Parsons Company | WA-H-215, Rev. A | 4/19/96 | HVAC, Mid & End Stations, "A" Piping Plan - Hanford  |
| D960365-A-O | Ralph M. Parsons Company | WA-H-216, Rev. A | 4/19/96 | HVAC, Mid & End Stations, "B" Piping Plan - Hanford  |
| D960366-B-O | Ralph M. Parsons Company | WA-H-221, Rev. B | 4/19/96 | HVAC, Mid & End Stations, Chilled Water & Air Flow Diagrams - Hanford                                |
| D960367-A-O | Ralph M. Parsons Company | WA-H-231, Rev. A | 4/19/96 | HVAC, Mid & End Stations, Sequences of Operation I/O Summary Sheet - Hanford                         |
| D960368-A-O | Ralph M. Parsons Company | WA-H-241, Rev. A | 4/19/96 | HVAC, Mid & End Stations Sections, Sheet 1 - Hanford   |
| D960369-A-O | Ralph M. Parsons Company | WA-H-242, Rev. A | 4/19/96 | HVAC, Mid & End Stations Sections, Sheet 2 - Hanford   |
| D960370-B-O | Ralph M. Parsons Company | WA-H-411, Rev. B | 4/19/96 | HVAC, Details, Sheet 1 - Hanford   |
| D960371-A-O | Ralph M. Parsons Company | WA-H-412, Rev. A | 4/19/96 | HVAC, Details, Sheet 2 - Hanford   |
| D960379-A-O | Ralph M. Parsons Company | WA-H-501, Rev. A | 4/19/96 | HVAC, Corner Station, Equipment Schedules, Sheet 1 - Hanford   |
| D960380-A-O | Ralph M. Parsons Company | WA-H-502, Rev. A | 4/9/96  | HVAC Corner Station, Equipment Schedules, Sheet 2 - Hanford.   |
| D960381-A-O | Ralph M. Parsons Company | WA-H-511, Rev. A | 4/9/96  | HVAC, Corner Station, LVEA Floor Plan, Sheet 1 - Hanford.  |
| D960382-A-O | Ralph M. Parsons Company | WA-H-512, Rev. A | 4/9/96  | HVAC, Corner Station, LVEA, Floor Plan, Sheet 2 - Hanford.   |
| D960383-A-O | Ralph M. Parsons Company | WA-H-513, Rev. A | 4/9/96  | HVAC, Corner Station, LVEA and OSB, Mechanical Room, Piping Plan - Hanford.                          |
| D960384-A-O | Ralph M. Parsons Company | WA-H-521, Rev. A | 4/9/96  | HVAC, Corner Station, Air Flow Diagrams - Hanford.   |
| D960385-A-O | Ralph M. Parsons Company | WA-H-541, Rev. A | 4/9/96  | HVAC, Corner Station, Sequences of Operation, I/O Summary - Hanford.                                 |
| D960386-A-O | Ralph M. Parsons Company | WA-H-551, Rev. A | 4/9/96  | HVAC, Corner Station, Sections, Sheet 1 - Hanford.   |
| D960387-A-O | Ralph M. Parsons Company | WA-H-552, Rev. A | 4/9/96  | HVAC, Corner Station, Sections, Sheet 2 - Hanford.   |
| D960388-B-O | Ralph M. Parsons Company | WA-E-001, Rev. B | 4/9/96  | Electrical, Standard Symbols, Abbreviations and Acronyms - Hanford.                                  |
| D960389-B-O | Ralph M. Parsons Company | WA-E-002, Rev. B | 4/9/96  | Electrical, Standard, Plan Symbols - Hanford.  |
| D960390-B-O | Ralph M. Parsons Company | WA-E-003, Rev. B | 4/9/96  | Electrical, Standard Schematic and Wiring Diagrams, Symbols - Hanford.                               |
| D960391-B-O | Ralph M. Parsons Company | WA-E-004         | 4/9/96  | Electrical, Standard, One and Three Line Diagram, Symbols - Hanford.                                 |
| D960392-B-O | Ralph M. Parsons Company | WA-E-007, Rev. B | 4/9/96  | Electrical, Schedules, Material - Hanford.   |
| D960393-A-O | Ralph M. Parsons Company | WA-E-008, Rev. A | 4/9/96  | Electrical, Typical, End or Mid Station, Single Line Diagram - Hanford.                              |
| D960394-B-O | Ralph M. Parsons Company | WA-E-105, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Office Area, Receptacle and Power Plan - Hanford.                   |
| D960395-B-O | Ralph M. Parsons Company | WA-E-106, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Lab Area, Receptable and Power Plan - Hanford.                      |
| D960396-B-O | Ralph M. Parsons Company | WA-E-107, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Office Area, Lighting Plan - Hanford.                               |
| D960397-B-O | Ralph M. Parsons Company | WA-E-108, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Lab Area, Lighting Plan - Hanford.                                  |
| D960398-B-O | Ralph M. Parsons Company | WA-E-109, Rev. B | 4/9/96  | Electrical, Corner Station, Communications Riser Diagram - Hanford.                                  |
| D960399-B-O | Ralph M. Parsons Company | WA-E-110, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Office Area, Fire Detection and Security Plan.                      |
| D960400-B-O | Ralph M. Parsons Company | WA-E-111, Rev. B | 4/9/96  | Electrical, Corner Station, OSB, Lab Area, Fire Detection and Security Plan - Hanford.               |
| D960401-B-O | Ralph M. Parsons Company | WA-E-112, Rev. B | 4/9/96  | Electrical, Corner Station, Chiller Plant, Maintenance Building, Grounding Plan - Hanford.           |
| D960402-B-O | Ralph M. Parsons Company | WA-E-113, Rev. B | 4/9/96  | Electrical, Corner Station, Chiller Plant, Maintenance Building, Power and Lighting Plans - Hanford. |
| D960403-A-O | Ralph M. Parsons Company | WA-E-114, Rev. A | 4/9/96  | Electrical, Corner Station, LVEA, Areas 101, 102, 103, 104, Details - Hanford                        |
| D960404-A-O | Ralph M. Parsons Company | WA-E-115, Rev. A | 4/9/96  | Electrical, Corner Station, OSB, Lighting and Power, Panel, Schedules - Hanford.                     |
| D960405-A-O | Ralph M. Parsons Company | WA-E-116, Rev. A | 4/9/96  | Electrical, Corner Station, OSB, Lighting and Power, Panel, Schedules - Hanford.                     |

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| D960406-A-O  | Ralph M. Parsons Company | WA-E-117, Rev. A | 4/9/96  | Electrical, Corner Station, Mechanical Room, Lighting and Power, Panel, Schedules - Hanford.           |
| D960407-A-O  | Ralph M. Parsons Company | WA-E-118, Rev. A | 4/9/96  | Electrical, Corner Station, LVEA, VEAC, Panel, Schedules - Hanford.                                    |
| D960408-A-O  | Ralph M. Parsons Company | WA-E-119, Rev. A | 4/9/96  | Electrical, Corner Station, LVEA, VEAC, Panel, Schedules - Hanford.                                    |
| D960409-A-O  | Ralph M. Parsons Company | WA-E-120, Rev. A | 4/9/96  | Electrical, Corner Station, LVEA, VEAC, Panel, Schedules - Hanford.                                    |
| D960410-A-O  | Ralph M. Parsons Company | WA-E-121, Rev. A | 4/9/96  | Electrical, Corner Station, LVEA, CDSAC, Panel, Schedules - Hanford.                                   |
| D960411-B-O  | Ralph M. Parsons Company | WA-E-201, Rev. B | 4/9/96  | Electrical, Mid and End A Stations, Lighting, Communications, Fire Detection Plan.                     |
| D960412-B-O  | Ralph M. Parsons Company | WA-E-202, Rev. B | 4/9/96  | Electrical, Mid and End A Stations, Lightning and Grounding Plan - Hanford.                            |
| D960413-B-O  | Ralph M. Parsons Company | WA-E-203, Rev. B | 4/9/96  | Electrical, Mid and End A Stations, Underground Plan - Hanford.  |
| D960414-A-O  | Ralph M. Parsons Company | WA-E-204, Rev. A | 4/9/96  | Electrical, Mid and End A Stations, Aboveground Power Plan - Hanford.                                  |
| D960415-A-O  | Ralph M. Parsons Company | WA-E-205, Rev. A | 4/9/96  | Electrical, Mid and End A Stations, Panel, Schedules - Hanford.  |
| D960416-A-O  | Ralph M. Parsons Company | WA-E-206, Rev. A | 4/9/96  | Electrical, Mid and End A Stations, Panel, Schedules - Hanford.  |
| D960417-A-O  | Ralph M. Parsons Company | WA-E-211, Rev. A | 4/9/96  | Electrical, Mid and End B Stations, Lighting, Communications, Fire Detection Plan - Hanford.           |
| D960418-A-O  | Ralph M. Parsons Company | WA-E-212, Rev. A | 4/9/96  | Electrical, Mid and End B Stations, Lightning and Grounding Plan - Hanford.                            |
| D960419-A-O  | Ralph M. Parsons Company | WA-E-213, Rev. A | 4/9/96  | Electrical, Mid and End B Stations, Underground Plan - Hanford.  |
| D960420-A-O  | Ralph M. Parsons Company | WA-E-214, Rev. A | 4/9/96  | Electrical, Mid and End B Stations, Aboveground Power Plan - Hanford.                                  |
| D960421-A-O  | Ralph M. Parsons Company | WA-E-400, Rev. A | 4/9/96  | Electrical, Corner Station, Underground Sections - Hanford.  |
| D960422-B-O  | Ralph M. Parsons Company | WA-E-401, Rev. B | 4/9/96  | Electrical, Corner Station, Details - Hanford.   |
| D960423-B-O  | Ralph M. Parsons Company | WA-E-402, Rev. B | 4/9/96  | Electrical, Corner Station, Grounding Schematic - Hanford.   |
| D960424-B-O  | Ralph M. Parsons Company | WA-E-404, Rev. B | 4/9/96  | Electrical, 250M Beam Tube Enclosure, Details - Hanford.   |
| D960425-A-O  | Ralph M. Parsons Company | WA-E-405, Rev. A | 4/9/96  | Electrical, Details - Hanford.   |
| D960426-A-O  | Ralph M. Parsons Company | WA-E-406, Rev. A | 4/9/96  | Electrical, Grounding Details, Sheet 1 - Hanford.  |
| D960427-B-O  | Ralph M. Parsons Company | WA-E-407, Rev. B | 4/9/96  | Electrical, Grounding Details, Sheet 2 - Hanford.  |
| D960428-B-O  | Ralph M. Parsons Company | WA-E-408, Rev. B | 4/9/96  | Electrical, Grounding Details, Sheet 3 - Hanford.  |
| D960429-B-O  | Ralph M. Parsons Company | WA-E-409, Rev. B | 4/9/96  | Electrical, Lightning Protection, Details - Hanford.   |
| D960430-A-O  | Ralph M. Parsons Company | WA-E-501, Rev. A | 4/9/96  | Electrical, Sections, and Details - Hanford.   |
| D960431-A-O  | Ralph M. Parsons Company | WA-E-502, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, Single Line Diagram - Hanford.                         |
| D960432-A-O  | Ralph M. Parsons Company | WA-E-503, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, Single Line Diagram - Hanford.                         |
| D960433-A-O  | Ralph M. Parsons Company | WA-E-504, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, LVEA, Receptacle and Power Plan - Hanford.             |
| D960434-A-O  | Ralph M. Parsons Company | WA-E-505, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, LVEA, Receptacle and Power Plan - Hanford.             |
| D960435-A-O  | Ralph M. Parsons Company | WA-E-506, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, LVEA, Lighting Plan - Hanford.                         |
| D960436-00-E | Craig Conley             |                  | 6/13/96 | BSC Mock-Up  |
| D960436-A-O  | Ralph M. Parsons Company | WA-E-507, Rev. A | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, LVEA, Grounding Plan - Hanford.                        |
| D960437-A-O  | Ralph M. Parsons Company | WA-E-508, Rev. A | 4/19/96 | Electrical, Corner Station, 3rd Interferometer, Power & Lighting, Parking & Observation Plan - Hanford |
| D960438-B-O  | Ralph M. Parsons Company | WA-E-509, Rev. B | 4/19/96 | Plumbing, Symbols & Abbreviations, Fixtures, Schedules & General Notes - Hanford                       |
| D960439-A-O  | Ralph M. Parsons Company | WA-P-001, Rev. A | 4/19/96 | Plumbing, Corner, Mid & End Stations, I/O Summary - Hanford  |
| D960440-A-O  | Ralph M. Parsons Company | WA-P-002, Rev. A | 4/19/96 | Plumbing, Corner Station, OSB Floor Plan - Hanford   |
| D960440-B-O  | Ralph M. Parsons Company | WA-P-112, Rev. B | 4/9/96  | Plumbing, Corner Station, OSB, Floor Plan - Hanford.   |
| D960441-B-O  | Ralph M. Parsons Company | WA-P-112 Rev. B  | 4/19/96 | Plumbing, Corner Station, Maintenance Building, Floor Plan & Flow Diagram - Hanford                    |
| D960442-A-O  | Ralph M. Parsons Company | WA-P-113, Rev. A | 4/19/96 | Plumbing, Corner Station, Riser Diagram - Hanford  |
| D960443-B-O  | Ralph M. Parsons Company | WA-P-131 Rev. B  | 4/19/96 | Plumbing, Mid & End Stations, Floor Plan - Hanford   |
| D960444-A-O  | Ralph M. Parsons Company | WA-P-211, Rev. A | 4/19/96 | Plumbing, Mid & End Stations, Riser Diagram & Schematics - Hanford                                     |
| D960445-A-O  | Ralph M. Parsons Company | WA-S-212, Rev. A | 4/19/96 | Plumbing Details - Hanford   |
| D960446-A-O  | Ralph M. Parsons Company | WA-P-411, Rev. A | 4/19/96 | Plumbing, Corner Station, LVEA Floor Plan - Hanford  |
| D960452-B-O  | Ralph M. Parsons Company | WA-A-101 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Floor Plan - Hanford   |
| D960453-B-O  | Ralph M. Parsons Company | WA-A-102 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 1 - Hanford                              |
| D960454-B-O  | Ralph M. Parsons Company | WA-A-103 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 2 - Hanford                              |
| D960455-B-O  | Ralph M. Parsons Company | WA-A-104 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 3 - Hanford                              |
| D960456-B-O  | Ralph M. Parsons Company | WA-A-105 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 4 - Hanford                              |
| D960457-A-O  | Ralph M. Parsons Company | WA-A-110 Rev. A  | 4/19/96 | Architectural, Corner Station, Roof Platform Plan - Hanford  |
| D960458-B-O  | Ralph M. Parsons Company | WA-A-121 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Reflected Ceiling Plan - Hanford                                   |
| D960459-B-O  | Ralph M. Parsons Company | WA-A-131 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA Roof Plan - Hanford  |
| D960460-B-O  | Ralph M. Parsons Company | WA-A-141 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA & OSB Elevations, Sheet 1 - Hanford                                |
| D960461-B-O  | Ralph M. Parsons Company | WA-A-142 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA & OSB Elevations, Sheet 2 - Hanford                                |
| D960462-B-O  | Ralph M. Parsons Company | WA-A-151 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 1 - Hanford                                  |
| D960463-B-O  | Ralph M. Parsons Company | WA-A-152 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 2 - Hanford                                  |
| D960464-B-O  | Ralph M. Parsons Company | WA-A-153 Rev. B  | 4/19/96 | Architectural, Corner Station, LVEA & OSB Sections, Sheet 3 - Hanford                                  |
| D960465-B-O  | Ralph M. Parsons Company | WA-S-101 Rev. B  | 4/19/96 | Structural, Corner Station, LVEA Foundation Plan - Hanford   |



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| D960466-B-O  | Ralph M. Parsons Company    | WA-S-104 Rev. B    | 4/19/96 | Structural, Corner Station, Air Handling Unit, Enclosure Plan - Hanford   |
| D960467-B-O  | Ralph M. Parsons Company    | WA-S-105 Rev. B    | 4/19/96 | Structural, Corner Station, Air Handling Unit, Enclosure Elevs & Sects - Hanford  |
| D960468-B-O  | Ralph M. Parsons Company    | WA-S-106 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Roof Framing Plan - Hanford  |
| D960469-B-O  | Ralph M. Parsons Company    | WA-S-108 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 1 - Hanford   |
| D960470-B-O  | Ralph M. Parsons Company    | WA-S-109 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 1 - Hanford   |
| D960471-A-O  | Ralph M. Parsons Company    | WA-S-404, Rev. A   | 4/19/96 | Structural, Corner Station, LVEA Foundation, Schedule & Details - Hanford   |
| D960472-B-O  | Ralph M. Parsons Company    | WA-S-109 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 2 - Hanford   |
| D960473-B-O  | Ralph M. Parsons Company    | WA-S-110 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevation, Sheet 3 - Hanford  |
| D960474-B-O  | Ralph M. Parsons Company    | WA-S-111 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 4 - Hanford   |
| D960475-B-O  | Ralph M. Parsons Company    | WA-S-112 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 5 - Hanford   |
| D960476-B-O  | Ralph M. Parsons Company    | WA-S-113 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevation, Sheet 6 - Hanford  |
| D960477-B-O  | Ralph M. Parsons Company    | WA-S-114 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 7 - Hanford   |
| D960478-B-O  | Ralph M. Parsons Company    | WA-S-115 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 8 - Hanford   |
| D960479-B-O  | Ralph M. Parsons Company    | WA-S-116 Rev. B    | 4/19/96 | Structural, Corner Station, LVEA Framing, Elevations, Sheet 9 - Hanford   |
| D960480-B-O  | Ralph M. Parsons Company    | WA-H-111, Rev. B   | 4/19/96 | HVAC, Corner Station, LVEA Floor Plan, Sheet 1 - Hanford  |
| D960481-B-O  | Ralph M. Parsons Company    | WA-H-112, Rev. B   | 4/19/96 | HVAC, Corner Station, LVEA Floor Plan, Sheet 2 - Hanford  |
| D960482-A-O  | Ralph M. Parsons Company    | WA-H-117, Rev. A   | 4/19/96 | HVAC, Corner Station, LVEA & OSB Mechanical Room Piping Plan - Hanford  |
| D960483-A-O  | Ralph M. Parsons Company    | WA-H-151, Rev. A   | 4/19/96 | HVAC, Corner Station Sections, Sheet 1 - Hanford  |
| D960484-A-O  | Ralph M. Parsons Company    | WA-H-152, Rev. A   | 4/19/96 | HVAC, Corner Station Sections, Sheet 2 - Hanford  |
| D960485-B-O  | Ralph M. Parsons Company    | WA-E-005, Rev. B   | 4/9/96  | Electrical, Overall, Single Line Diagram - Hanford.   |
| D960487-B-O  | Ralph M. Parsons Company    | WA-E-006, Rev. B   | 4/9/96  | Electrical, Corner Station, Single Line Diagram - Hanford.  |
| D960488-A-O  | Ralph M. Parsons Company    | WA-E-100, Rev. A   | 4/9/96  | Electrical, Corner Station, LVEA, Areas 101, 103, 104, Receptacle and Power Plan - Hanford.   |
| D960489-B-O  | Ralph M. Parsons Company    | WA-E-101, Rev. B   | 4/9/96  | Electrical, Corner Station, LVEA, Areas 102, 105, Receptacle and Power Plan - Hanford.  |
| D960490-B-O  | Ralph M. Parsons Company    | WA-E-102, Rev. B   | 4/9/96  | Electrical, Corner Station, LVEA, Lighting Plan - Hanford.  |
| D960491-B-O  | Ralph M. Parsons Company    | WA-E-103           | 4/9/96  | Electrical, Corner Station, Grounding Plan - Hanford.   |
| D960492-A-O  | Ralph M. Parsons Company    | WA-E-104           | 4/9/96  | Electrical, Corner Station, Power and Lighting, Parking and Observation Plan - Hanford.   |
| D960493-A-O  | Ralph M. Parsons Company    | WA-E-508           | 4/19/96 | Electrical, Corner Station, 3rd Interferometer Panel Schedules - Hanford  |
| D960493-B-O  | Ralph M. Parsons Company    | WA-E-508           | 4/9/96  | Electrical, Corner Station, 3rd Interferometer, Panel Schedules - Hanford.  |
| D960494-B-O  | Ralph M. Parsons Company    | WA-P-111 Rev. B    | 4/19/96 | Plumbing, Corner Station, LVEA Floor Plan - Hanford   |
| D960499-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Wedge Stop  |
| D960500-00-D | Janeen Hazel                |                    | 5/23/96 | Magnet-to-Standoff Fixture  |
| D960501-00-D | Janeen Hazel                |                    | 5/23/96 | Magnet  |
| D960502-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Front Stiffener   |
| D960503-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Top Plate   |
| D960504-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Leg   |
| D960505-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Bottom Plate  |
| D960506-00-D | Janeen Hazel                |                    | 5/23/96 | LOS Side Stiffener  |
| D960507-00-B | Fred Asiri                  |                    | 4/29/96 | Alternate Guided Support.   |
| D960520-00-V |                             | V049-8-214         | 2/7/96  | Main Turbo Cart, QDP80/STPH2000C Combination with Controller and Accessories  |
| D960520-01-V | Process Systems Int'l, Inc. | V049-8-214         | 4/17/96 | Main Turbo Cart, QDP80/STPH2000C Combination with Controller and Accessories  |
| D960521-00-V | Process Systems Int'l, Inc. | V049-2-001         | 2/5/96  | General Arrangement: Roughing Pump Cart with Digital Gauge Display  |
| D960522-00-V | Process Systems Int'l, Inc. | V049-8-215         | 1/20/96 | Auxiliary Turbo Pump Cart, EXT70H/MD4 w/ Accessories  |
| D960522-01-V | Process Systems Int'l, Inc. | V049-8-215         | 4/17/96 | Auxiliary Turbo Pump Cart, EXT70H/MD4 with Accessories  |
| D960546-00-V | Process Systems Int'l, Inc. | V049-3-002, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Overall Site Plan, Washington Site  |
| D960547-00-V | Process Systems Int'l, Inc. | V049-3-004, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-200, 300, 400, 500, 700, 800 Assembly, Washington Site and Louisiana Site (Additional Detail for Corner Station, Washington Site) |
| D960548-00-V | Process Systems Int'l, Inc. | V049-3-006, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Installation Details, Washington Site and Louisiana Site   |
| D960549-00-V | Process Systems Int'l, Inc. | V049-3-101, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Vertex Section  |
| D960550-00-V | Process Systems Int'l, Inc. | V049-3-102, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Left Beam Manifold  |
| D960551-00-V | Process Systems Int'l, Inc. | V049-3-103, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Right Beam Manifold   |
| D960552-00-V | Process Systems Int'l, Inc. | V049-3-104, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Diagonal Section  |
| D960553-00-V | Process Systems Int'l, Inc. | V049-3-106, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Vertex Section  |
| D960554-00-V | Process Systems Int'l, Inc. | V049-3-107, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Left Beam Manifold  |
| D960555-00-V | Process Systems Int'l, Inc. | V049-3-108, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Right Beam Manifold   |
| D960556-00-V | Process Systems Int'l, Inc. | V049-3-109, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Diagonal Section  |
| D960557-00-V | Process Systems Int'l, Inc. | V049-3-111, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Vertex Section   |
| D960558-00-V | Process Systems Int'l, Inc. | V049-3-112, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Left Beam Manifold   |
| D960559-00-V | Process Systems Int'l, Inc. | V049-3-113, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Right Beam Manifold  |

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| D960560-00-V | Process Systems Int'l, Inc. | V049-3-114, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Diagonal Section         |
| D960561-00-V | Process Systems Int'l, Inc. | V049-3-116, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Vertex Section                           |
| D960562-00-V | Process Systems Int'l, Inc. | V049-3-117, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Left Beam Manifold                       |
| D960563-00-V | Process Systems Int'l, Inc. | V049-3-118, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Right Beam Manifold                      |
| D960564-00-V | Process Systems Int'l, Inc. | V049-3-119, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Diagonal Section                         |
| D960565-00-V | Process Systems Int'l, Inc. | V049-3-121, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-100A and PNL-100B Assembly, Washington Site, Corner Station       |
| D960566-00-V | Process Systems Int'l, Inc. | V049-3-122, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-100A and PNL-100B Wiring Diagram, Washington Site, Corner Station |
| D960567-00-V | Process Systems Int'l, Inc. | V049-3-001, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Mechanical Drawings - General Notes, Legend & Drawing List, Washington and Louisiana Site             |
| D960568-00-V | Process Systems Int'l, Inc. | V049-3-124, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Conduit Stub-Up Plan, Washington Site, Corner Station      |
| D960569-00-V | Process Systems Int'l, Inc. | V049-3-125, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Vacuum Carts Interface Plan, Washington Site, Corner Station          |
| D960570-00-V | Process Systems Int'l, Inc. | V049-3-127, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Data Highway Plan, Washington Site, Vertex Section                    |
| D960571-00-V | Process Systems Int'l, Inc. | V049-3-128, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Data Highway Plan, Washington Site, Left Beam Manifold                |
| D960572-00-V | Process Systems Int'l, Inc. | V049-3-129, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Data Highway Plan, Washington Site, Right Beam Manifold               |
| D960573-00-V | Process Systems Int'l, Inc. | V049-3-130, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Data Highway Plan, Washington Site, Diagonal Section                  |
| D960574-00-V | Process Systems Int'l, Inc. | V049-3-131, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Data Highway Interconnection Diagram, Washington Site, Corner Station |
| D960575-00-V | Process Systems Int'l, Inc. | V049-3-201, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Left Mid-Station                    |
| D960576-00-V | Process Systems Int'l, Inc. | V049-3-202, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Left Mid-Station                    |
| D960577-00-V | Process Systems Int'l, Inc. | V049-3-203, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Left Mid-Station         |
| D960578-00-V | Process Systems Int'l, Inc. | V049-3-204, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Left Mid-Station                         |
| D960579-00-V | Process Systems Int'l, Inc. | V049-3-205, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Conduits Stub-Up Plan, Washington Site, Left Mid-Station   |
| D960580-00-V | Process Systems Int'l, Inc. | V049-3-206, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Vacuum Cart Interface Plan, Washington Site, Left Mid-Station         |
| D960581-00-V | Process Systems Int'l, Inc. | V049-3-207, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-200 Wiring Diagram, Washington Site, Left Mid-Station             |
| D960582-00-V | Process Systems Int'l, Inc. | V049-3-208, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - CDS Interface Diagram, Washington Site, Left Mid-Station              |
| D960583-00-V | Process Systems Int'l, Inc. | V049-3-301, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Right Mid-Station                   |
| D960584-00-V | Process Systems Int'l, Inc. | V049-3-302, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Right Mid-Station                   |
| D960585-00-V | Process Systems Int'l, Inc. | V049-3-303, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Right Mid-Station        |
| D960586-00-V | Process Systems Int'l, Inc. | V049-3-304, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Right Mid-Station                        |
| D960587-00-V | Process Systems Int'l, Inc. | V049-3-305, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Conduit Stub-Up Plan, Washington Site, Right Mid-Station   |
| D960589-00-V | Process Systems Int'l, Inc. | V049-3-307, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-300 Wiring Diagram, Washington Site, Right Mid-Station            |
| D960591-00-V | Process Systems Int'l, Inc. | V049-3-401, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Left End Station                    |
| D960592-00-V | Process Systems Int'l, Inc. | V049-3-402, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Left End Station                    |
| D960593-00-V | Process Systems Int'l, Inc. | V049-3-403, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Left End Station         |
| D960594-00-V | Process Systems Int'l, Inc. | V049-3-404, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Left End Station                         |
| D960595-00-V | Process Systems Int'l, Inc. | V049-3-405, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Conduit Stub-Up Plan, Washington Site, Left End Station    |
| D960596-00-V | Process Systems Int'l, Inc. | V049-3-406, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Vacuum Cart Interface Plan, Washington Site, Left End Station         |
| D960597-00-V | Process Systems Int'l, Inc. | V049-3-407, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-400 Wiring Diagram, Washington Site, Left End Station             |
| D960598-00-V | Process Systems Int'l, Inc. | V049-3-408, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - CDS Interface Diagram, Washington Site, Left End Station              |
| D960599-00-V | Process Systems Int'l, Inc. | V049-3-501, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Plan, Washington Site, Right End Station                   |
| D960600-00-V | Process Systems Int'l, Inc. | V049-3-502, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Cable Tray Plan, Washington Site, Right End Station                   |
| D960601-00-V | Process Systems Int'l, Inc. | V049-3-503, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Instrument Electrical Plan, Washington Site, Right End Station        |
| D960602-00-V | Process Systems Int'l, Inc. | V049-3-504, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Power Plan, Washington Site, Right End Station                        |
| D960603-00-V | Process Systems Int'l, Inc. | V049-3-505, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Electrical Conduit Stub-Up Plan, Washington Site, Right End Station   |
| D960604-00-V | Process Systems Int'l, Inc. | V049-3-506, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - Vacuum Cart Interface Plan, Washington Site, Right End Station        |
| D960605-00-V | Process Systems Int'l, Inc. | V049-3-507, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - PNL-500 Wiring Diagram, Washington Site, Right End Station            |
| D960606-00-V | Process Systems Int'l, Inc. | V049-3-508, Rev. 0 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Electrical Drawings - CDS Interface Diagram, Washington Site, Right End Station             |
| D960707-02-O | Ralph M. Parsons Company    | BT-C-001, Rev. 2   | 4/19/96 | Civil, Drawing Index, Location and Vicinity Maps - Hanford  |
| D960708-02-O | Ralph M. Parsons Company    | BT-C-002, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication, Hanford - Civil, General Notes, Legend & Abbreviations  |
| D960709-02-O | Ralph M. Parsons Company    | BT-C-003, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Drawing Matrix  |
| D960710-02-O | Ralph M. Parsons Company    | BT-C-004, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Typical Sections And Details  |
| D960711-02-O | Ralph M. Parsons Company    | BT-C-013, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm Plan and Profile STA 28+00 To STA 42+00   |
| D960712-02-O | Ralph M. Parsons Company    | BT-C-015, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm Plan and Profile STA 56+00 To STA 70+00   |
| D960713-02-O | Ralph M. Parsons Company    | BT-C-017, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, Plan and Profile STA 84+00 To STA 98+00  |
| D960714-00-O | Ralph M. Parsons Company    | BT-C-018, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, Plan and Profile, STA 98+00 To STA 112+00  |
| D960715-02-O | Ralph M. Parsons Company    | BT-C-020, Rev. 2   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, Plan and Profile, STA 126+00 To STA 133+00.  |
| D960716-A-O  | Ralph M. Parsons Company    | BT-C-021, Rev. A   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm Mid-Station Plot Plan.  |
| D960717-A-O  | Ralph M. Parsons Company    | BT-C-022, Rev. A   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, Mid-Station Grading Plan.  |
| D960718-A-O  | Ralph M. Parsons Company    | BT-C-023, Rev. A   | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, Mid-Station Utility Plan.  |



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|--------------|-----------------------------|-------------------|---------|---|
| D960719-A-O  | Ralph M. Parsons Company    | BT-C-025, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, End-Station Plot Plan.   |
| D960720-A-O  | Ralph M. Parsons Company    | BT-C-026, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, End-Station Grading Plan   |
| D960721-A-O  | Ralph M. Parsons Company    | BT-C-027, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Northwest Arm, End-Station Utility Plan   |
| D960722-02-O | Ralph M. Parsons Company    | BT-C-033, Rev. 2  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Plan and Profile, STA 28+00 To STA 42+00   |
| D960723-02-O | Ralph M. Parsons Company    | BT-C-035, Rev. 2  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Plan and Profile, STA 56+00 To STA 70+00   |
| D960724-02-O | Ralph M. Parsons Company    | BT-C-037, Rev. 02 | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Plan and Profile, STA 84+00 To STA 98+00   |
| D960725-02-O | Ralph M. Parsons Company    | BT-C-038, Rev. 02 | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Plan and Profile, STA 98+00 To STA 112+00  |
| D960726-02-O | Ralph M. Parsons Company    | BT-C-040, Rev. 2  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Plan and Profile, STA 126+00 To STA 133+00   |
| D960727-A-O  | Ralph M. Parsons Company    | BT-C-041, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Mid-Station, Plot Plan.  |
| D960728-A-O  | Ralph M. Parsons Company    | BT-C-042, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Mid-Station, Grading Plan.   |
| D960729-A-O  | Ralph M. Parsons Company    | BT-C-043, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, Mid-Station, Utility Plan.   |
| D960730-A-O  | Ralph M. Parsons Company    | BT-C-045, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, End-Station, Plot Plan.  |
| D960731-A-O  | Ralph M. Parsons Company    | BT-C-046, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, End-Station Grading Plan.  |
| D960732-A-O  | Ralph M. Parsons Company    | BT-C-047, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Southwest Arm, End-Station Utility Plan.  |
| D960733-A-O  | Ralph M. Parsons Company    | BT-C-051, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Sitework Details.   |
| D960734-A-O  | Ralph M. Parsons Company    | BT-C-052, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Civil Grading Sections & Details.   |
| D960735-A-O  | Ralph M. Parsons Company    | BT-S-601, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural General Notes, Abbreviations & Legend  |
| D960736-A-O  | Ralph M. Parsons Company    | BT-S-602, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Standard, Concrete Details Sheet 1   |
| D960737-A-O  | Ralph M. Parsons Company    | BT-S-603, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Standard Concrete Details Sheet 2.   |
| D960738-A-O  | Ralph M. Parsons Company    | BT-S-604, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Mid Station "B" & End Station "B" Foundation Plans   |
| D960739-A-O  | Ralph M. Parsons Company    | BT-S-605, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Mid & End Stations "B" Air Handling Unit Enclosure Plans   |
| D960740-A-O  | Ralph M. Parsons Company    | BT-S-606, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Mid & End Stations "B" Air Handling Unit Enclosure, Elevations and Sects.  |
| D960741-A-O  | Ralph M. Parsons Company    | BT-S-607, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Mid and End Stations "B" Foundation Schedule and Details.  |
| D960742-A-O  | Ralph M. Parsons Company    | BT-S-608, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Structural Foundation, Sections & Details.  |
| D960743-A-O  | Ralph M. Parsons Company    | BT-E-601, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Electrical Mid & End Stations "B" Grounding Plan  |
| D960744-A-O  | Ralph M. Parsons Company    | BT-E-602, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Electrical Mid & End Stations "B" Underground Plan.   |
| D960745-A-O  | Ralph M. Parsons Company    | BT-E-603, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Electrical Grounding Details Sheet 1.   |
| D960746-A-O  | Ralph M. Parsons Company    | BT-E-604, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Electrical Grounding Details Sheet 2.   |
| D960747-00-O | Ralph M. Parsons Company    | BT-P-601, Rev. A  | 4/19/96 | BTE Sitework and Fabrication, Hanford - Plumbing, Mid and End Stations "B", Underground Plan  |
| D960748-A-O  | Ralph M. Parsons Company    | BT-P-602, Rev. A  | 4/19/96 | BTE Sitework & Fabrication - Hanford, WA, Plumbing Mid & End Stations "B" Riser Diagram & Schematics  |
| D960752-00-D | Janeen Hazel                |                   | 5/23/96 | Optical Level Leveler   |
| D960753-00-D | Janeen Hazel                |                   | 5/23/96 | Wire and Optics Fixture Assembly  |
| D960755-00-D | Janeen Hazel                |                   | 5/23/96 | LOS Larger Wire Standoff  |
| D960761-00-D | Janeen Hazel                |                   | 5/23/96 | LOS Lifting Fixture   |
| D960762-00-D | Janeen Hazel                |                   | 5/23/96 | Kapton Template   |
| D960763-00-D | Janeen Hazel                |                   | 5/23/96 | LOS Dummy Mass, 3 Degree Wedge  |
| D960779-00-V | Stu Motew                   | VO49-8-214        | 5/20/96 | Main Turbo Cart QDP80/STPH2000C Combination With Controller and Accessories   |
| D960780-A-O  | Ralph M. Parsons Company    | BT-S-101, Rev. A  | 5/28/96 | Structural, General Notes, Abbreviations & Legend - Hanford.  |
| D960781-A-O  | Ralph M. Parsons Company    | BT-S-102, Rev. A  | 5/28/96 | Structural, Key Plan of Beam Tube Enclosure and Partial Enlarged Plan - Hanford.  |
| D960782-A-O  | Ralph M. Parsons Company    | BT-S-102A, Rev. A | 5/28/96 | Structural, Key Plan of Beam Tube Enclosure and Partial Enlarged Plan - Hanford.  |
| D960783-A-O  | Ralph M. Parsons Company    | BT-S-103, Rev. A  | 5/28/96 | Structural, Beam Tube Enclosure Plans, Sections and Details - Hanford.  |
| D960793-00-E | Craig Conley                |                   | 6/6/96  | Beam Splitter Blank.  |
| D960794-00-E | Craig Conley                |                   | 6/6/96  | Core Optic Blank.   |
| D960795-00-V | Process Systems Int'l, Inc. | VO49-8-331        | 5/31/96 | Electrical Schematic: Remote Main Electrical Controller, EDP200/EH2600 Combination with Inlet Gate Valve and Accessories  |
| D960795-01-V | Process Systems Int'l, Inc. | VO49-8-331        | 6/13/96 | Electrical Schematic: Remote Main Electrical Controller, EDP200/EH2600 Combination with Inlet Gate Valve and Accessories  |
| D960795-02-V | Process Systems Int'l, Inc. | VO49-8-331        | 7/9/96  | Electrical Schematic: Remote Main Electrical Controller EDP 200/EH2600 Combination with Inlet Gate Valve and Accessories  |
| D960796-00-V | Process Systems Int'l, Inc. | VO49-8-332        | 5/31/96 | Electrical Schematic: Local Box for EDP200 Chemical Pump in Combo with EH2600 Booster, Gate Valve, Controller and Accessories   |
| D960796-01-V | Process Systems Int'l, Inc. | VO49-8-332        | 6/13/96 | Electrical Schematic: Local Box for EDP200 Chemical Pump in Combo with EH2600 Booster, Gate Valve, Controller and Accessories   |
| D960797-00-V | Process Systems Int'l, Inc. | NCB301090         | 5/3/96  | Edwards Pumping System - Installation Drawing, EDP200   |
| D960799-00-D | Dennis Coyne                |                   | 6/14/96 | LVEA Integration Layout (Derived from LIGO-D960129-01-E)  |
| D960800-00-D | Janeen Hazel                |                   | 5/23/96 | Suspension Drawing Package: (1)LOS Assembly Drawings, (2) LOS Suspension Structure Assembly Drawings, (3) LOS Fixtures, (4) SOS Assembly Drawings, and (5) SOS Fixtures |
| D960805-00-V | Process Systems Int'l, Inc. | VO49-8-141        | 6/13/96 | General Arrangement: Roughing Pump Cart with Digital Gauge Display  |
| D960808-03-O | Ralph M. Parsons Company    | RG-C-017, Rev. 3  | 6/6/96  | Rough Grading, Southwest Arm Plan and Profile, Sta 84+00 to Sta 98+00   |
| D960809-00-E | Craig Conley                |                   | 6/21/96 | HAM Mock-Up   |
| D960810-00-O | Ralph M. Parsons Company    | RG-C-017, Rev. 3  | 6/6/96  | Rough Grading Southwest Arm, Plan and Profile, Sta 84+00 through 98+00  |
| D960811-00-O | Ralph M. Parsons Company    | RG-C-028, Rev. 3  | 6/6/96  | Rough Grading, Southwest Arm, Culvert General Arrangements  |
| D960812-A-O  | Ralph M. Parsons Company    | LA-S-601, Rev. A  | 6/14/96 | Structural, Beam Tube Enclosure, General Notes, Abbreviation and Legend   |

| Document No  | Full Name                | ContractorDocNo   | Doc Dt  | Full Title   |
|--------------|--------------------------|-------------------|---------|--|
| D960813-A-O  | Ralph M. Parsons Company | LA-S-602, Rev. A  | 6/14/96 | Structural, Key Plan of Beam Tube Enclosure & Partial Enlarged Plans   |
| D960814-A-O  | Ralph M. Parsons Company | LA-S-602A, Rev. A | 6/14/96 | Structural, Southeast Arm, Beam Tube Enclosure, Partial Enlarged Plans   |
| D960815-A-O  | Ralph M. Parsons Company | LA-S-603, Rev. A  | 6/14/96 | Structural, Beam Tube Enclosure Plans, Sections & Details  |
| D960816-B-O  | Ralph M. Parsons Company | LA-G-001, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - General, Cover and Drawing, Index Sheet 1.                                |
| D960817-B-O  | Ralph M. Parsons Company | LA-G-002, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - General, Drawing, Index, Sheet 2.   |
| D960818-B-O  | Ralph M. Parsons Company | LA-G-003, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - General, Drawing, Index Sheet 3   |
| D960819-A-O  | Ralph M. Parsons Company | LA-C-001, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Drawing, Index, Location and Vicinity Maps.                        |
| D960820-A-O  | Ralph M. Parsons Company | LA-C-002, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, General, Notes, Legend and Abbreviations.                          |
| D960821-A-O  | Ralph M. Parsons Company | LA-C-003, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Drawing, Matrix.   |
| D960822-A-O  | Ralph M. Parsons Company | LA-C-004, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Typical, Sections and Details.                                     |
| D960823-A-O  | Ralph M. Parsons Company | LA-C-005, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Plot Plan.   |
| D960824-A-O  | Ralph M. Parsons Company | LA-C-006, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Plot Plan, Enlarged Plan.                          |
| D960825-A-O  | Ralph M. Parsons Company | LA-C-007, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Grading Plan.                                      |
| D960826-A-O  | Ralph M. Parsons Company | LA-C-008, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Grading Plan, Enlarged Plan.                       |
| D960827-A-O  | Ralph M. Parsons Company | LA-C-009, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Utility Plan.                                      |
| D960828-A-O  | Ralph M. Parsons Company | LA-C-010, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Corner Station, Utility Plan, Enlarged Plan.                       |
| D960829-A-O  | Ralph M. Parsons Company | LA-C-011, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 0+00 to Station 14+00.    |
| D960830-A-O  | Ralph M. Parsons Company | LA-C-012, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 14+00 to Station 28+00.   |
| D960831-A-O  | Ralph M. Parsons Company | LA-C-013, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 28+00 to Station 42+00.   |
| D960832-A-O  | Ralph M. Parsons Company | LA-C-014, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 42+00 to Station 56+00.   |
| D960833-A-O  | Ralph M. Parsons Company | LA-C-015, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 56+00 to Station 70+00.   |
| D960834-A-O  | Ralph M. Parsons Company | LA-C-016, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 70+00 to Station 84+00.   |
| D960835-A-O  | Ralph M. Parsons Company | LA-C-017, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 84+00 to Station 98+00.   |
| D960836-A-O  | Ralph M. Parsons Company | LA-C-018, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 98+00 to Station 112+00.  |
| D960837-A-O  | Ralph M. Parsons Company | LA-C-019, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 112+00 to Station 126+00. |
| D960838-A-O  | Ralph M. Parsons Company | LA-C-020, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Plan and Profile, Station 126+00 to Station 133+00. |
| D960839-A-O  | Ralph M. Parsons Company | LA-C-021, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Pump-Station, Plot Plan                             |
| D960840-00-D | Prof. Katherine Creath   |                   | 3/26/96 | LIGO-NIST Meeting 3/26/96.   |
| D960840-A-O  | Ralph M. Parsons Company | LA-C-022, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Pump-Station, Grading Plan.                         |
| D960841-A-O  | Ralph M. Parsons Company | LA-C-023, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, Pump-Station, Utility Plan.                         |
| D960842-A-O  | Ralph M. Parsons Company | LA-C-025, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, End-Station, Plot Plan                              |
| D960843-A-O  | Ralph M. Parsons Company | LA-C-026, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, End-Station, Grading Plan.                          |
| D960844-A-O  | Ralph M. Parsons Company | LA-C-027, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southwest Arm, End-Station, Utility Plan.                          |
| D960845-A-O  | Ralph M. Parsons Company | LA-C-031, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 0+00 to Station 14+00.    |
| D960846-A-O  | Ralph M. Parsons Company | LA-C-032, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 14+00 to Station 28+00.   |
| D960847-A-O  | Ralph M. Parsons Company | LA-C-033, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 28+00 to Station 42+00.   |
| D960848-A-O  | Ralph M. Parsons Company | LA-C-034, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 42+00 to Station 56+00.   |
| D960849-A-O  | Ralph M. Parsons Company | LA-C-035, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 56+00 to Station 70+00.   |
| D960850-A-O  | Ralph M. Parsons Company | LA-C-036, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 70+00 to Station 84+00.   |
| D960851-A-O  | Ralph M. Parsons Company | LA-C-037, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 84+00 to Station 98+00.   |
| D960852-A-O  | Ralph M. Parsons Company | LA-C-038, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 98+00 to Station 112+00.  |
| D960853-A-O  | Ralph M. Parsons Company | LA-C-039, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 112+00 to Station 126+00. |
| D960854-A-O  | Ralph M. Parsons Company | LA-C-040, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Plan and Profile, Station 126+00 to Station 133+00. |
| D960855-A-O  |                          | LA-C-041, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Pump-Station, Plot Plan.                            |
| D960856-A-O  | Ralph M. Parsons Company | LA-C-042, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Pump-Station, Grading Plan.                         |
| D960857-A-O  | Ralph M. Parsons Company | LA-C-043, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, Pump-Station, Utility Plan.                         |
| D960858-A-O  | Ralph M. Parsons Company | LA-C-045, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, End-Station, Plot Plan.                             |
| D960859-A-O  | Ralph M. Parsons Company | LA-C-046, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, End-Station, Grading Plan.                          |
| D960860-A-O  | Ralph M. Parsons Company | LA-C-047, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Southeast Arm, End-Station, Utility Plan.                          |
| D960861-A-O  | Ralph M. Parsons Company | LA-C-051, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Sitework Details, Sheet 1.   |
| D960862-A-O  | Ralph M. Parsons Company | LA-C-052, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Sitework Details, Sheet 2.   |
| D960863-A-O  | Ralph M. Parsons Company | LA-C-053, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Grading Sections and Details, Sheet 1                              |
| D960864-A-O  | Ralph M. Parsons Company | LA-C-055, Rev. A  | 6/14/96 | Livingston Facility Final Design Package - Civil, Utility Details, Sheet 1   |
| D960865-B-O  | Ralph M. Parsons Company | LA-A-001, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - Architectural, Legend, Symbols and Abbreviations.                         |
| D960866-B-O  | Ralph M. Parsons Company | LA-A-002, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - Architectural, General Notes and Life Safety Plan.                        |
| D960867-B-O  | Ralph M. Parsons Company | LA-A-101, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA Floor Plan.                           |
| D960868-B-O  | Ralph M. Parsons Company | LA-A-102, Rev. B  | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 1          |

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| D960869-B-O | Ralph M. Parsons Company | LA-A-103, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, Partial Floor Plan, Sheet 2.               |
| D960870-B-O | Ralph M. Parsons Company | LA-A-104, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 3.                |
| D960871-B-O | Ralph M. Parsons Company | LA-A-105, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA Partial Floor Plan, Sheet 4.                |
| D960872-B-O | Ralph M. Parsons Company | LA-A-107, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Floor Plan.                                 |
| D960873-B-O | Ralph M. Parsons Company | LA-A-108, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB Partial Floor Plan, Sheet 1                  |
| D960874-B-O | Ralph M. Parsons Company | LA-A-109, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Partial Floor Plan, Sheet 2.                |
| D960875-A-O | Ralph M. Parsons Company | LA-A-110, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Roof Platform Plan.                              |
| D960876-B-O | Ralph M. Parsons Company | LA-A-111, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Enlarged Plans.                             |
| D960877-B-O | Ralph M. Parsons Company | LA-A-112, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Maintenance, Building Plans.                     |
| D960878-B-O | Ralph M. Parsons Company | LA-A-121, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, Reflected Ceiling Plan.                    |
| D960879-B-O | Ralph M. Parsons Company | LA-A-122, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Partial, Reflected Ceiling Plan.            |
| D960880-B-O | Ralph M. Parsons Company | LA-A-123, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Partial, Reflected Ceiling Plan, Sheet 2.   |
| D960881-B-O | Ralph M. Parsons Company | LA-A-131, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, Roof Plan.                                 |
| D960882-B-O | Ralph M. Parsons Company | LA-A-132, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, OSB, Roof Plan.                                  |
| D960883-B-O | Ralph M. Parsons Company | LA-A-141, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, OSB, Elevations, Sheet 1.                  |
| D960884-B-O | Ralph M. Parsons Company | LA-A-142, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, OSB, Elevations, Sheet 2.                  |
| D960885-B-O | Ralph M. Parsons Company | LA-A-143, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Maintenance, Building, Elevations, Sections.     |
| D960886-B-O | Ralph M. Parsons Company | LA-A-151, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, OSB, Sections, Sheet 1.                    |
| D960887-B-O | Ralph M. Parsons Company | LA-A-152, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, OSB, Sections, Sheet 2.                    |
| D960888-B-O | Ralph M. Parsons Company | LA-A-153, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, LVEA, OSB, Sections, Sheet 3.                    |
| D960889-B-O | Ralph M. Parsons Company | LA-A-161, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Wall Sections, Sheet 1.                          |
| D960890-B-O | Ralph M. Parsons Company | LA-A-162, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Wall Sections, Sheet 2.                          |
| D960891-B-O | Ralph M. Parsons Company | LA-A-163, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Corner Station, Wall Sections, Sheet 3.                          |
| D960892-A-O | Ralph M. Parsons Company | LA-A-201, Rev. A | 6/14/96 | LA-A-201   |
| D960893-B-O | Ralph M. Parsons Company | LA-A-202, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, End Stations, Floor Plans.                                       |
| D960894-B-O | Ralph M. Parsons Company | LA-A-221, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, End Stations, Reflected, Ceiling Plan, Roof Plan.                |
| D960895-B-O | Ralph M. Parsons Company | LA-A-241, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, End Stations, Building, Elevations.                              |
| D960896-B-O | Ralph M. Parsons Company | LA-A-251, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, End Stations, Building, Sections.                                |
| D960897-B-O | Ralph M. Parsons Company | LA-A-261, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Mid and End Stations, Wall Sections.                             |
| D960898-B-O | Ralph M. Parsons Company | LA-A-421, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Exterior Wall, Details.  |
| D960899-B-O | Ralph M. Parsons Company | LA-A-422, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Interior Wall, Details.  |
| D960900-B-O | Ralph M. Parsons Company | LA-A-423, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Window and Louver Details.                                       |
| D960901-B-O | Ralph M. Parsons Company | LA-A-424, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Ceiling and Miscellaneous Interior Details.                      |
| D960902-B-O | Ralph M. Parsons Company | LA-A-425, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Roof and Miscellaneous Exterior Details.                         |
| D960903-B-O | Ralph M. Parsons Company | LA-A-426, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Door Details.  |
| D960904-B-O | Ralph M. Parsons Company | LA-A-427, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Interior, Elevations and Miscellaneous Details.                  |
| D960905-B-O | Ralph M. Parsons Company | LA-A-428, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Architectural, Wall, Type, Schedules.   |
| D960906-A-O | Ralph M. Parsons Company | LA-A-429, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Architectural, Slab, Waterproofing System.                                      |
| D960907-B-O | Ralph M. Parsons Company | LA-S-001, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, General Notes, Abbreviations, and Legend.                           |
| D960908-B-O | Ralph M. Parsons Company | LA-S-002, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Concrete Details, Sheet 1                                 |
| D960909-B-O | Ralph M. Parsons Company | LA-S-003, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Concrete Details, Sheet 2.                                |
| D960910-B-O | Ralph M. Parsons Company | LA-S-004, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Structural Steel, Connection, Details, Sheet 1.           |
| D960911-B-O | Ralph M. Parsons Company | LA-S-005, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Structural Steel, Connection, Details, Sheet 2            |
| D960912-B-O | Ralph M. Parsons Company | LA-S-006, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Structural Steel, Connection, Details, Sheet 3            |
| D960913-B-O | Ralph M. Parsons Company | LA-S-007, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Structural Steel, Connection, Details, Sheet 4            |
| D960914-B-O | Ralph M. Parsons Company | LA-S-008, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Standard, Structural Steel, Ladder, Details.                        |
| D960915-B-O | Ralph M. Parsons Company | LA-S-009, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Structural Steel, Stair and Handrail Details.                       |
| D960916-A-O | Ralph M. Parsons Company | LA-S-010, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Key Plan.   |
| D960917-B-O | Ralph M. Parsons Company | LA-S-101, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Foundation Plan.                              |
| D960918-B-O | Ralph M. Parsons Company | LA-S-102, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Foundation Plan.                               |
| D960919-A-O | Ralph M. Parsons Company | LA-S-103, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, Air Handling Unit, Enclosure Plan.                  |
| D960920-B-O | Ralph M. Parsons Company | LA-S-104 Rev. B  | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, Air Handling Unit, Enclosure, Elevations and Sects. |
| D960921-B-O | Ralph M. Parsons Company | LA-S-105, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Roof Framing Plan.                            |
| D960922-B-O | Ralph M. Parsons Company | LA-S-106, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Crane Support, Framing Plan.                  |
| D960923-B-O | Ralph M. Parsons Company | LA-S-107, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 1                  |
| D960924-B-O | Ralph M. Parsons Company | LA-S-108, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 2                  |
| D960925-B-O | Ralph M. Parsons Company | LA-S-109, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 3.                 |

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| D960926-B-O | Ralph M. Parsons Company | LA-S-110, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 4.                           |
| D960927-B-O | Ralph M. Parsons Company | LA-S-111, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 5.                           |
| D960928-B-O | Ralph M. Parsons Company | LA-S-112, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 6.                           |
| D960929-B-O | Ralph M. Parsons Company | LA-S-113, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 7.                           |
| D960930-B-O | Ralph M. Parsons Company | LA-S-114, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 8.                           |
| D960931-B-O | Ralph M. Parsons Company | LA-S-115, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Framing, Elevations, Sheet 9.                           |
| D960932-B-O | Ralph M. Parsons Company | LA-S-116, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Roof Framing Plans.                                      |
| D960933-B-O | Ralph M. Parsons Company | LA-S-117, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevation, Sheet 1.                             |
| D960934-B-O | Ralph M. Parsons Company | LA-S-118, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevation, Sheet 2.                             |
| D960935-B-O | Ralph M. Parsons Company | LA-S-119, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevations, Sheet 3.                            |
| D960936-B-O | Ralph M. Parsons Company | LA-S-120, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevations, Sheet 4.                            |
| D960937-B-O | Ralph M. Parsons Company | LA-S-121, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevations, Sheet 5.                            |
| D960938-B-O | Ralph M. Parsons Company | LA-S-122, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevations, Sheet 6.                            |
| D960939-B-O | Ralph M. Parsons Company | LA-S-123, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Framing, Elevation, Sheet 7.                             |
| D960940-A-O | Ralph M. Parsons Company | LA-S-124, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Maintenance, Building, Roof Framing Plan, Framing Elevations.                 |
| D960941-A-O | Ralph M. Parsons Company | LA-S-125, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Maintenance, Building, Roof Framing Plan, Framing Elevations.                 |
| D960942-B-O | Ralph M. Parsons Company | LA-S-201, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Mid Stations "A" and "B", Foundation Plans.                                   |
| D960943-B-O | Ralph M. Parsons Company | LA-S-202, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, Mid Stations "A" and "B", Roof Framing Plans.                                 |
| D960944-A-O | Ralph M. Parsons Company | LA-S-203, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Mid Stations "A" and "B", Framing Elevations.                                 |
| D960945-B-O | Ralph M. Parsons Company | LA-S-301, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Foundation Plans.                                   |
| D960946-A-O | Ralph M. Parsons Company | LA-S-302, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Air Handling Unit, Enclosure Plans.                 |
| D960947-A-O | Ralph M. Parsons Company | LA-S-303, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Air Handling Unit, Enclosure, Elevations and Sects. |
| D960948-B-O | Ralph M. Parsons Company | LA-S-304, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, End Station "A", Roof and Crane Girder, Framing Plans.                        |
| D960949-B-O | Ralph M. Parsons Company | LA-S-305, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Framing, Elevation, Sheet 1.                        |
| D960950-B-O | Ralph M. Parsons Company | LA-S-306, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Framing, Elevations, Sheet 2                        |
| D960951-B-O | Ralph M. Parsons Company | LA-S-307, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Framing, Elevations, Sheet 3                        |
| D960952-A-O | Ralph M. Parsons Company | LA-S-308, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, End Station "B", Roof and Crane Girder, Framing Plans.                        |
| D960953-A-O | Ralph M. Parsons Company | LA-S-401, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, End Stations "A" and "B", Foundation, Schedule, Details.                      |
| D960954-A-O | Ralph M. Parsons Company | LA-S-402, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Foundation, Schedule, Details Sheet 1.                   |
| D960955-A-O | Ralph M. Parsons Company | LA-S-403, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, OSB, Foundation, Schedule, Details Sheet 2.                   |
| D960956-A-O | Ralph M. Parsons Company | LA-S-404, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Corner Station, LVEA, Foundation, Schedule, Details.                          |
| D960957-A-O | Ralph M. Parsons Company | LA-S-405, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Foundation, Sections, Details, Sheet 1.                                       |
| D960958-A-O | Ralph M. Parsons Company | LA-S-406, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Foundation, Sections, Details, Sheet 2.                                       |
| D960959-A-O | Ralph M. Parsons Company | LA-S-407, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Structural, Structural Steel, Sections, Details.  |
| D960960-B-O | Ralph M. Parsons Company | LA-H-001, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Legend & Abbreviations  |
| D960961-B-O | Ralph M. Parsons Company | LA-H-002, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Legend & General Notes  |
| D960962-B-O | Ralph M. Parsons Company | LA-H-003, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Equipment Schedules, Sheet 1  |
| D960963-B-O | Ralph M. Parsons Company | LA-H-004, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Equipment Schedules, Sheet 2  |
| D960964-B-O | Ralph M. Parsons Company | LA-H-005, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Equipment Schedules, Sheet 3  |
| D960965-A-O | Ralph M. Parsons Company | LA-H-006, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Equipment Schedules, Sheet 4  |
| D960966-A-O | Ralph M. Parsons Company | LA-H-007, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Control System Diagram  |
| D960967-B-O | Ralph M. Parsons Company | LA-H-111, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, LVEA Floor Plan, Sheet 1  |
| D960968-B-O | Ralph M. Parsons Company | LA-H-112, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, LVEA Floor Plan, Sheet 2  |
| D960969-B-O | Ralph M. Parsons Company | LA-H-113, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, OSB Floor Plan, Sheet 1   |
| D960970-B-O | Ralph M. Parsons Company | LA-H-114, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, OSB Floor Plan, Sheet 2   |
| D960971-A-O | Ralph M. Parsons Company | LA-H-115, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Chillers Yard Floor Plan  |
| D960972-A-O | Ralph M. Parsons Company | LA-H-116, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Maintenance Building Floor Plan                                     |
| D960973-A-O | Ralph M. Parsons Company | LA-H-117, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, LVEA & OSB Mechanical Room Piping Plan                              |
| D960974-B-O | Ralph M. Parsons Company | LA-H-121, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Chilled Water Flow Diagram  |
| D960975-B-O | Ralph M. Parsons Company | LA-H-122, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Air Flow Diagrams, Sheet 1  |
| D960976-A-O | Ralph M. Parsons Company | LA-H-123, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Air Flow Diagrams, Sheet 2  |
| D960977-A-O | Ralph M. Parsons Company | LA-H-141, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Sequences of Operation & I/O Summary, Sheet 1                       |
| D960978-A-O | Ralph M. Parsons Company | LA-H-142, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station, Sequences of Operation & I/O Summary, Sheet 1                       |
| D960979-A-O | Ralph M. Parsons Company | LA-H-151, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station Sections, Sheet 1  |
| D960980-A-O | Ralph M. Parsons Company | LA-H-152, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station Sections, Sheet 2  |
| D960981-A-O | Ralph M. Parsons Company | LA-H-153, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Corner Station Sections, Sheet 3  |
| D960982-B-O | Ralph M. Parsons Company | LA-H-211, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "A", Floor Plan   |

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| D960983-A-O | Ralph M. Parsons Company | LA-H-212, Rev. A | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "B", Floor Plan   |
| D960984-A-O | Ralph M. Parsons Company | LA-H-213, Rev. A | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "A", Chiller Yard Plan  |
| D960985-A-O | Ralph M. Parsons Company | LA-H-214, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "B", Chiller Yard Plan  |
| D960986-A-O | Ralph M. Parsons Company | LA-H-215, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "A", Piping Plan  |
| D960987-A-O | Ralph M. Parsons Company | LA-H-216, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station "B", Piping Plan  |
| D960988-A-O | Ralph M. Parsons Company | LA-H-221, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station, Chilled Water & Air Flow Diagrams                                    |
| D960989-A-O | Ralph M. Parsons Company | LA-H-231,Rev.A   | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station, Sequences of Operation and I/O Summary Sheet                         |
| D960990-A-O | Ralph M. Parsons Company | LA-H-241,Rev.A   | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station Sections, Sheet 1   |
| D960991-A-O | Ralph M. Parsons Company | LA-H-242,Rev.A   | 6/14/96 | Livingston Facility Final Design Package - HVAC, End Station Sections, Sheet 2   |
| D960992-B-O | Ralph M. Parsons Company | LA-H-411, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Details, Sheet 1  |
| D960993-A-O | Ralph M. Parsons Company | LA-H-412, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - HVAC, Details, Sheet 2  |
| D960994-B-O | Ralph M. Parsons Company | LA-E-001,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Standard Symbols, Abbreviations & Acronyms                                  |
| D960995-B-O | Ralph M. Parsons Company | LA-E-002,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Standard Plan Symbols   |
| D960996-B-O | Ralph M. Parsons Company | LA-E-003,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Standard Schematic & Wiring Diagrams Symbols                                |
| D960997-B-O | Ralph M. Parsons Company | LA-E-004,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Standard One & Three Line Diagrams Symbols                                  |
| D960998-B-O | Ralph M. Parsons Company | LA-E-005,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Overall Single Line Diagram   |
| D960999-B-O | Ralph M. Parsons Company | LA-E-006         | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Single Line Diagram   |
| D961000-B-O | Ralph M. Parsons Company | LA-E-007,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Schedules Material  |
| D961001-A-O | Ralph M. Parsons Company | LA-E-008,Rev.A   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Typical End Station, Single Line Diagram                                    |
| D961002-A-O | Ralph M. Parsons Company | LA-E-100,Rev.A   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, Areas 101,103, 104, Receptacle & Power Plan           |
| D961003-B-O | Ralph M. Parsons Company | LA-E-101,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, Areas 102, 105, Receptacle & Power Plan               |
| D961004-B-O | Ralph M. Parsons Company | LA-E-102, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, Lighting Plan   |
| D961005-B-O | Ralph M. Parsons Company | LA-E-103,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Grounding and Lighting Protection Plan                      |
| D961006-A-O |                          | LA-E-104, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Power & Lighting Parking & Observation Plan                 |
| D961007-B-O | Ralph M. Parsons Company | LA-E-105, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Office Area Receptacle & Power Plan                    |
| D961008-B-O | Ralph M. Parsons Company | LA-E-106,Rev.B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Lab Area Receptacle & Power Plan                       |
| D961009-B-O | Ralph M. Parsons Company | LA-E-107, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Office Area Lighting Plan                              |
| D961010-B-O | Ralph M. Parsons Company | LA-E-108, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Lab Area Lighting Plan                                 |
| D961011-B-O | Ralph M. Parsons Company | LA-E-109, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Communications Riser Diagram                                |
| D961012-B-O | Ralph M. Parsons Company | LA-E-110, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Office Area Fire Detection & Security Plan             |
| D961013-B-O | Ralph M. Parsons Company | LA-E-111, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Lab Area Fire Detection & Security Plan                |
| D961014-B-O | Ralph M. Parsons Company | LA-E-112, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Chiller Plant & Maintenance Building Grounding Plan         |
| D961015-B-O | Ralph M. Parsons Company | LA-E-113, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Chiller Plant & Maintenance Building Power & Lighting Plans |
| D961016-A-O | Ralph M. Parsons Company | LA-E-114, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, Areas 101, 102, 103, 104, Details                     |
| D961017-A-O | Ralph M. Parsons Company | LA-E-115, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Lighting and Power Panel Schedules                     |
| D961018-A-O | Ralph M. Parsons Company | LA-E-116, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, OSB, Lighting and Power Panel Schedules                     |
| D961019-A-O | Ralph M. Parsons Company | LA-E-117, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Mechanical Room Lighting and Power Panel Schedules          |
| D961020-A-O | Ralph M. Parsons Company | LA-E-118, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, VEAC Panel Schedules                                  |
| D961021-A-O | Ralph M. Parsons Company | LA-E-119, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, VEAC Panel Schedules                                  |
| D961022-A-O | Ralph M. Parsons Company | LA-E-120, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, VEAC Panel Schedules                                  |
| D961023-A-O | Ralph M. Parsons Company | LA-E-121, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, CDSAC Panel Schedules                                 |
| D961024-A-O | Ralph M. Parsons Company | LA-E-122, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, LVEA, OSB, Panel Schedules                                  |
| D961025-B-O | Ralph M. Parsons Company | LA-E-201, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station A, Lighting, Communications & Fire Detection Plan               |
| D961026-B-O | Ralph M. Parsons Company | LA-E-202, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station A, Lightning & Grounding Plan                                   |
| D961027-B-O | Ralph M. Parsons Company | LA-E-203, Rev.B  | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station A, Underground Plan   |
| D961028-A-O | Ralph M. Parsons Company | LA-E-204, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station A, Aboveground Power Plan                                       |
| D961029-A-O | Ralph M. Parsons Company | LA-E-205, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, End A and B Stations, Panel Schedules                                       |
| D961030-A-O | Ralph M. Parsons Company | LA-E-206, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Mid & End A Stations, Panel Schedules                                       |
| D961031-A-O | Ralph M. Parsons Company | LA-E-207, Rev.A  | 6/14/96 | Livingston Facility Final Design Package - Electrical, Mid Station A, Grounding & Underground Plan                                 |
| D961032-A-O | Ralph M. Parsons Company | LA-E-211, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station, B Lightning, Communications, Fire Detection Plan.              |
| D961033-A-O | Ralph M. Parsons Company | LA-E-212, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station, B Lightning, Grounding Plan.                                   |
| D961034-A-O | Ralph M. Parsons Company | LA-E-213, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station B, Underground Plan   |
| D961035-A-O | Ralph M. Parsons Company | LA-E-214, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, End Station B, Aboveground Power Plan.                                      |
| D961036-A-O | Ralph M. Parsons Company | LA-E-217, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, Mid Station B, Grounding, Underground Plan.                                 |
| D961037-A-O | Ralph M. Parsons Company | LA-E-400, Rev. A | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Underground, Sections.                                      |
| D961038-B-O | Ralph M. Parsons Company | LA-E-401, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Details.  |
| D961039-B-O | Ralph M. Parsons Company | LA-E-402, Rev. B | 6/14/96 | Livingston Facility Final Design Package - Electrical, Corner Station, Grounding, Schematic.                                       |

| Document No  | Full Name                   | ContractorDocNo    | Doc Dt  | Full Title   |
|--------------|-----------------------------|--------------------|---------|--|
| D961041-A-O  | Ralph M. Parsons Company    | LA-E-405, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Grounding, Details, Sheet 1.  |
| D961042-B-O  | Ralph M. Parsons Company    | LA-E-406, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Grounding, Details, Sheet 2.  |
| D961043-B-O  | Ralph M. Parsons Company    | LA-E-407, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Grounding, Details, Sheet 3.  |
| D961044-B-O  | Ralph M. Parsons Company    | LA-E-408, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Lightning Protection, Details.  |
| D961045-A-O  | Ralph M. Parsons Company    | LA-E-409, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Electrical, Sections, Details.  |
| D961046-B-O  | Ralph M. Parsons Company    | LA-P-001, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Symbols, Abbreviations, Fixtures, Schedules, General Notes.   |
| D961047-A-O  | Ralph M. Parsons Company    | LA-P-002, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Corner and End Stations, I/O Summary.   |
| D961048-B-O  | Ralph M. Parsons Company    | LA-P-111, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Corner Station, LVEA, Floor Plan.   |
| D961049-B-O  | Ralph M. Parsons Company    | LA-P-112, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Corner Station, OSB, Floor Plan.  |
| D961050-B-O  | Ralph M. Parsons Company    | LA-P-113, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Corner Station, Maintenance, Building, Floor Plan, Flow Diagram.  |
| D961051-A-O  | Ralph M. Parsons Company    | LA-P-131, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Corner Station, Riser Diagram.  |
| D961052-B-O  | Ralph M. Parsons Company    | LA-P-211, Rev. B   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, End Station, Floor Plan.  |
| D961053-A-O  | Ralph M. Parsons Company    | LA-P-212, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, End Station, Riser Diagram, Schematics.   |
| D961054-A-O  | Ralph M. Parsons Company    | LA-P-411, Rev. A   | 6/14/96 | Livingston Facility Final Design Package - Plumbing, Details.  |
| D961060-00-V | Process Systems Int'l, Inc. | V049-8-266         | 7/1/96  | Physical Drawing of the Model CE-1A, A Round Style Air-Cooled Package Chiller Unit   |
| D961061-00-V | Process Systems Int'l, Inc. | V049-8-267         | 7/1/96  | Physical Drawing for the Model CE-3A Packaged Air-Cooled Chiller Unit  |
| D961062-00-V | Process Systems Int'l, Inc. | V049-8-301         | 7/1/96  | Wiring Schematic for the Model, CE-1A, Packaged Air-Cooled Chiller Unit  |
| D961063-00-V | Process Systems Int'l, Inc. | V049-8-302         | 7/1/96  | P & ID For the Model: CE-1A (Round Style) Air-Cooled Packaged Water Chiller Unit   |
| D961064-00-V | Process Systems Int'l, Inc. | V049-8-303         | 7/1/96  | Wiring Schematic for the Model: CE-3A Packaged Air-Cooled Chiller Unit   |
| D961065-00-V | Process Systems Int'l, Inc. | V049-8-304         | 7/1/96  | Piping & Instrumentation Diagram for the Model: CE-3A, Packaged Air-Cooled Chiller Unit  |
| D961066-00-V | Process Systems Int'l, Inc. | V049-3-306, Rev. 0 | 4/26/96 | Vacuum Cart Interface Plan, LIGO Vacuum Equipment - Washington Site, Right Mid Station   |
| D961069-01-V | Process Systems Int'l, Inc. | V049-0-001         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping & Instrumentation Diagram, Legend (Station Diagram - Hanford and Louisiana Sites).   |
| D961070-01-V | Process Systems Int'l, Inc. | V049-0-002         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Beam Splitter Chamber (BSC) All But Corner Vertex Arms.   |
| D961071-01-V | Process Systems Int'l, Inc. | V049-0-003         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Beam Splitter Chamber (BSC), Corner Vertex Arms.  |
| D961072-01-V | Process Systems Int'l, Inc. | V049-0-004         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Horizontal Access Module (HAM).   |
| D961073-01-V | Process Systems Int'l, Inc. | V049-0-005         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, 112cm and 122cm Gate Valves.  |
| D961074-01-V | Process Systems Int'l, Inc. | V049-0-006         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, 80K Cryopump.   |
| D961075-01-V | Process Systems Int'l, Inc. | V049-0-010         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Left End Station.  |
| D961076-01-V | Process Systems Int'l, Inc. | V049-0-011         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Left Mid Station.  |
| D961077-01-V | Process Systems Int'l, Inc. | V049-0-012         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Left Beam Manifold.  |
| D961078-01-V | Process Systems Int'l, Inc. | V049-0-013         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Vertex Section.  |
| D961079-01-V | Process Systems Int'l, Inc. | V049-0-014         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Diagonal Section.  |
| D961080-01-V | Process Systems Int'l, Inc. | V049-0-015         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Right Beam Manifold.   |
| D961081-01-V | Process Systems Int'l, Inc. | V049-0-016         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Right Mid Station.   |
| D961082-01-V | Process Systems Int'l, Inc. | V049-0-017         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Right End Station.   |
| D961083-01-V | Process Systems Int'l, Inc. | V049-0-018         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washington Site, Corner Station Mechanical Room.  |
| D961084-01-V | Process Systems Int'l, Inc. | V049-0-020         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site, Left End Station.   |
| D961085-01-V | Process Systems Int'l, Inc. | V049-0-021         | 4/26/96 | V049-0-021   |
| D961086-01-V | Process Systems Int'l, Inc. | V049-0-022         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site, Left Beam Manifold.   |
| D961087-01-V | Process Systems Int'l, Inc. | V049-0-023         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site, Vertex Section.   |
| D961088-01-V | Process Systems Int'l, Inc. | V049-0-024         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site, Right Beam Manifold.  |
| D961089-01-V | Process Systems Int'l, Inc. | V049-0-025         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site, Right End Station.  |
| D961090-01-V | Process Systems Int'l, Inc. | V049-0-026         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Louisiana Site,   |
| D961091-00-V | Process Systems Int'l, Inc. | V049-0-031         | 4/24/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping and Instrumentation Diagram, Washing System.   |
| D961093-00-V | Process Systems Int'l, Inc. | V049-4-001         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Beam Tube Splitter Chamber (BSC), Lower Shell Weldment/Machining, Upper Shell Weldment/Machining, Roll-Up Details, Stiffener and Miscellaneous Deta |
| D961094-00-V | Process Systems Int'l, Inc. | V049-4-002         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Horizontal Access Module Assembly (HAM), Roll-Up Details, 84.25 I.D. Access Cover.  |
| D961095-00-V | Process Systems Int'l, Inc. | V049-4-004         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 80K Cryo Pump, Long General Arrangement.  |
| D961096-00-V | Process Systems Int'l, Inc. | V049-4-005         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 80K Cryo Pump, Short General Arrangement.   |
| D961097-00-V | Process Systems Int'l, Inc. | V049-4-010         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Roughing Pump Cart Arrangement Assembly.  |
| D961098-00-V | Process Systems Int'l, Inc. | V049-4-011         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Main Turbo Pump Cart, Arrangement Assembly.   |
| D961099-00-V | Process Systems Int'l, Inc. | V049-4-012         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Main Turbo Pump Cart Frame Extension.   |
| D961100-00-V | Process Systems Int'l, Inc. | V049-4-014         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Cover, Type I Beam Splitter Chamber (BSC).  |
| D961101-00-V | Process Systems Int'l, Inc. | V049-4-017         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 44 5/8" I.D. Flange Detail (Grooved).   |
| D961102-00-V | Process Systems Int'l, Inc. | V049-4-019         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60 1/2" I.D. Flange Detail (BSC) Grooved.   |
| D961103-00-V | Process Systems Int'l, Inc. | V049-4-018         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 48 1/4" I.D. Flange Detail (Grooved).   |
| D961104-00-V | Process Systems Int'l, Inc. | V049-4-020         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 72 1/4" I.D. Flange Detail (Grooved).   |
| D961105-00-V | Process Systems Int'l, Inc. | V049-4-021         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 84 1/4" I.D. Flange Detail HAM (Grooved).   |



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| D961106-00-V | Process Systems Int'l, Inc. | v049-4-022         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 104 1/2" I.D. Flange Detail, Beam Splitter Chamber (BSC), Grooved.   |
| D961107-00-V | Process Systems Int'l, Inc. | V049-4-023         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Chamber Support Assembly, Beam Splitter Chamber (BSC).               |
| D961108-00-V | Process Systems Int'l, Inc. | V049-4-025         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Beam Splitter Chamber (BSC), Annulus Piping.                         |
| D961109-00-V | Process Systems Int'l, Inc. | V049-4-028         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 72 1/4" I.D. Flange Detail (Flat Faced).                             |
| D961110-00-V | Process Systems Int'l, Inc. | V049-4-029         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 48 1/4" I.D. Flange Detail, (Flat Faced)                             |
| D961111-00-V | Process Systems Int'l, Inc. | V049-4-031         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60 1/2" I.D. Flange Detail, (HAM) Grooved.                           |
| D961112-00-V | Process Systems Int'l, Inc. | V049-4-032         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60 1/2" I.D. Flange Detail, (HAM) Flat Faced.                        |
| D961113-00-V | Process Systems Int'l, Inc. | V049-4-033         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 44" Gate Valve Support Frame.  |
| D961114-00-V | Process Systems Int'l, Inc. | V049-4-034         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 48" Gate Valve Support Frame.  |
| D961115-00-V | Process Systems Int'l, Inc. | V049-4-036         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - BSC Floor Assembly and Details, Beam Splitter Chamber.               |
| D961116-00-V | Process Systems Int'l, Inc. | V049-4-040         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - HAM Bellows, Tie Rod Assembly, Horizontal Access Module.             |
| D961117-00-V | Process Systems Int'l, Inc. | V049-4-041         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 104 1/2" I.D. Flange Detail, Beam Splitter Chamber (BSC) Flat Faced. |
| D961118-00-V | Process Systems Int'l, Inc. | V049-4-043         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Pipe Bridge, Corner Station.   |
| D961119-00-V | Process Systems Int'l, Inc. | V049-4-045         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - RGA/AUX. Turbo Conn. Assembly, Beam Splitter Chamber (BSC).          |
| D961120-00-V | Process Systems Int'l, Inc. | V049-4-047         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 44 5/8" I.D. X 72 1/4" I.D. Flange Detail, Flat Faced.               |
| D961121-00-V | Process Systems Int'l, Inc. | V049-4-052         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Horizontal Access Module (HAM), Vessel Support.                      |
| D961122-00-V | Process Systems Int'l, Inc. | V049-4-053         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60 1/2" I.D. Metal Bellows, Horizontal Access Chamber (HAM).         |
| D961123-00-V | Process Systems Int'l, Inc. | V049-4-054         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Horizontal Access Module (HAM), Annulus Piping.                      |
| D961124-00-V | Process Systems Int'l, Inc. | V049-4-042         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 44 5/8" I.D. Flange Detail, Flat Faced.                              |
| D961125-00-V | Process Systems Int'l, Inc. | V049-4-055         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60 1/2" I.D. Ring Detail, Reducing                                   |
| D961126-00-V | Process Systems Int'l, Inc. | V049-4-056         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 30 1/2" I.D. X 60 1/2" O.D. Flange Detail (Flat Faced).              |
| D961127-00-V | Process Systems Int'l, Inc. | V049-4-057         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 30 1/2" I.D. X 60 1/2" O.D. Flange Detail (Grooved).                 |
| D961128-00-V | Process Systems Int'l, Inc. | V049-4-058         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing -44 5/8" I.D. X 60 1/2" I.D. Flange Detail (Flat Faced).               |
| D961129-00-V | Process Systems Int'l, Inc. | V049-4-059         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Ship and Test Cover for 60 1/2" I.D. Flange.                         |
| D961130-00-V | Process Systems Int'l, Inc. | v049-4-060         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 44 5/8" I.D. Grooved and Slotted Flange.                             |
| D961131-00-V | Process Systems Int'l, Inc. | V049-4-066         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 6 1/2" I.D. X 72 1/4" O.D. BE-3A Flange (Flat).                      |
| D961132-00-V | Process Systems Int'l, Inc. | V049-4-068         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 48 1/4" I.D. X 68 1/2" O.D. 5.88 Offset Flange (Flat).               |
| D961133-00-V | Process Systems Int'l, Inc. | V049-4-072         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - PS-1 "T"-Post Support LN2 Piping.                                    |
| D961134-00-V | Process Systems Int'l, Inc. | V049-4-073         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - PS-2 Pipe Support 4' and 6' Span.                                    |
| D961135-00-V | Process Systems Int'l, Inc. | V049-4-074         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - PS-3 "T"-Post Support Mechanical Room Piping.                        |
| D961136-00-V | Process Systems Int'l, Inc. | V049-4-075         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - PS-4 Pipe Support, VE Piping.  |
| D961137-00-V | Process Systems Int'l, Inc. | V049-4-077         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 75 L/S Ion Pumps.  |
| D961138-00-V | Process Systems Int'l, Inc. | V049-4-078         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 25 L/S Ion Pumps.  |
| D961139-00-V | Process Systems Int'l, Inc. | V049-4-079         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 48 1/4" Flange Detail (Flat Faced).                                  |
| D961140-00-V | Process Systems Int'l, Inc. | V049-4-A1          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-1, 44 5/8" I.D. X 60 1/2" I.D.                             |
| D961141-00-V | Process Systems Int'l, Inc. | V049-4-A3          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-3 48 1/4" I.D. X 60 1/2" I.D.                              |
| D961142-00-V | Process Systems Int'l, Inc. | V049-4-A4, Rev. P2 | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - 60" HAM Cover, Grooved Type A-4, Horizontal Access Module.           |
| D961143-00-V | Process Systems Int'l, Inc. | V049-4-A6          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-6 48.25" I.D. X 60.50" I.D.                                |
| D961144-00-V | Process Systems Int'l, Inc. | V049-4-A7          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-7 60.50" I.D. X 72.25" I.D.                                |
| D961145-00-V | Process Systems Int'l, Inc. | V049-4-A11         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - BSC End Cover, Type A11, Beam Splitter Chamber.                      |
| D961146-00-V | Process Systems Int'l, Inc. | V049-4-A12         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-12 48.25" I.D. X 60.50" I.D. FLG.                          |
| D961147-00-V | Process Systems Int'l, Inc. | V049-4-A13         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-13 60.50" I.D. X 72.25" I.D.                               |
| D961148-00-V | Process Systems Int'l, Inc. | V049-4-A14         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-14 44 5/8" I.D. X 60 1/2" I.D.                             |
| D961149-00-V | Process Systems Int'l, Inc. | V049-4-A15         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Adapter A-15 48.25" I.D. X 60.50" I.D.                               |
| D961150-00-V | Process Systems Int'l, Inc. | V049-4-B1          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-1 72.25" I.D.  |
| D961151-00-V | Process Systems Int'l, Inc. | V049-4-B2A         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-2A 30.50" I.D. X 60.50" I.D., Mode Cleaner Tube.             |
| D961152-00-V | Process Systems Int'l, Inc. | V049-4-B2B         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-2B 30.50" I.D. X 60.50" I.D., Mode Cleaner Tube.             |
| D961153-00-V | Process Systems Int'l, Inc. | V049-4-B3A         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-3A 30.50" I.D. X 60.50" I.D., Mode Cleaner Tube.             |
| D961154-00-V | Process Systems Int'l, Inc. | V049-4-B4          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-4 48.25" I.D.  |
| D961155-00-V | Process Systems Int'l, Inc. | V049-4-B5A         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-5A 30.50" I.D. X 60.50" I.D., Mode Cleaner Tube.             |
| D961156-00-V | Process Systems Int'l, Inc. | V049-4-B6          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-6 48.25" I.D.  |
| D961157-00-V | Process Systems Int'l, Inc. | V049-4-B7          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-7 48.25" I.D.  |
| D961158-00-V | Process Systems Int'l, Inc. | V049-4-B8          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-8 72.25" I.D.  |
| D961159-00-V | Process Systems Int'l, Inc. | V049-4-B9          | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool B-9 72.25" I.D.  |
| D961160-00-V | Process Systems Int'l, Inc. | V049-4-BE2         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool BE-2 60.50" I.D.   |
| D961161-00-V | Process Systems Int'l, Inc. | V049-4-BE3         | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool BE-3 60.50" I.D. X 60.50" I.D.                                 |
| D961162-00-V | Process Systems Int'l, Inc. | V049-4-BE3A        | 4/26/96 | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool BE-3A 60.25" I.D. X 60.50" I.D.                                |

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|--------------|-----------------------------|------------------|----------|--|
| D961163-00-V | Process Systems Int'l, Inc. | V049-4-BE4       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool BE-4 44 5/8" I.D.   |
| D961164-00-V | Process Systems Int'l, Inc. | V049-4-BE5       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Spool BE-5 72.25" I.D.  |
| D961165-00-V | Process Systems Int'l, Inc. | V049-5-001       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement Plan, Corner Station, Washington.   |
| D961167-00-V | Process Systems Int'l, Inc. | V049-5-002       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement ISO, Corner Station, Washington.  |
| D961168-00-V | Process Systems Int'l, Inc. | V049-5-004       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, Right Mid Station, Washington.   |
| D961169-00-V | Process Systems Int'l, Inc. | V049-5-005       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, Right End Station, Washington.   |
| D961170-00-V | Process Systems Int'l, Inc. | V049-5-006       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, Left Mid Station, Washington.  |
| D961171-00-V | Process Systems Int'l, Inc. | V049-5-007       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, Left End Station, Washington.  |
| D961172-00-V | Process Systems Int'l, Inc. | V049-5-010       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, ISO, Right Mid Station, Washington.  |
| D961173-00-V | Process Systems Int'l, Inc. | V049-5-011       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Equipment Arrangement, ISO, Right End Station, Washington.  |
| D961174-00-V | Process Systems Int'l, Inc. | V049-5-012       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement Plan, Corner Station, Washington.  |
| D961175-00-V | Process Systems Int'l, Inc. | V049-5-013       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Elevations, Corner Station, Washington.   |
| D961176-00-V | Process Systems Int'l, Inc. | V049-5-014       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Sections, Corner Station, Washington.   |
| D961177-00-V | Process Systems Int'l, Inc. | V049-5-017       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Vacuum/Utility Pipe Arrangement, Lower Plan, Right Mid Station, Washington Site.  |
| D961178-00-V | Process Systems Int'l, Inc. | V049-5-018       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Elevation (Left), Right Mid Station, Washington Site  |
| D961179-00-V | Process Systems Int'l, Inc. | V049-5-019       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Sections and Details, Right Mid Station, Washington Site.   |
| D961180-00-V | Process Systems Int'l, Inc. | V049-5-021       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement Plan, Right End Station, Washington Site.  |
| D961181-00-V | Process Systems Int'l, Inc. | V049-5-022       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Elevation, Right End Station, Washington Site.  |
| D961182-00-V | Process Systems Int'l, Inc. | V049-5-023       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Sections, Right End Station, Washington Site.   |
| D961183-00-V | Process Systems Int'l, Inc. | V049-5-026       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Vacuum/Utility Pipe Arrangement - Lower Plan, Left Mid Station, Washington Site, LN2/GN2 Arrangement, Upper Plan (Right), Upper Plan (Left), Piping Arr |
| D961184-00-V | Process Systems Int'l, Inc. | V049-5-027       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement - Elevation (Right), Left Mid Station, Washington Site, Elevation (Left).  |
| D961185-00-V | Process Systems Int'l, Inc. | V049-5-028       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangements, Sections and Details, Left Mid Station, Washington Site.   |
| D961186-00-V | Process Systems Int'l, Inc. | V049-5-030       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Plan, Left End Station, Washington Site.  |
| D961187-00-V | Process Systems Int'l, Inc. | V049-5-031       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Elevation, Left End Station, Washington Site.   |
| D961188-00-V | Process Systems Int'l, Inc. | V049-5-032       | 4/26/96  | LIGO Vacuum Equipment Final Design Report - Volume V, Mechanical Drawing - Piping Arrangement, Sections, Left End Station, Washington Site.  |
| D961191-00-A | Gregory Tarle               |                  | 5/13/96  | References for Alec Habig.   |
| D961191-00-A | Stuart Mufson               |                  | 5/13/96  | References for Alec Habig.   |
| D961194-B-B  | Process Systems Int'l, Inc. | VO49-8-193       | 1/18/96  | Body Weldment (BW/FLG), G44E, G44P (GNB#103225-01)   |
| D961194-C-B  | Process Systems Int'l, Inc. | 103225-01 (GNB)  | 4/5/96   | Body Weldment (BW/FLG), G44E, G44P   |
| D961195-A-B  | Process Systems Int'l, Inc. | VO49-8-196       | 2/18/96  | Assembly Drawing, G44E, (GNB#103280)   |
| D961195-B-B  | Process Systems Int'l, Inc. | 103280 (GNB)     | 4/5/96   | Assembly Drawing, G44 Electric   |
| D961196-A-B  | Process Systems Int'l, Inc. | VO49-8-195       | 2/10/96  | Assembly Drawing, G44P, (GNB#103279)   |
| D961196-B-B  | Process Systems Int'l, Inc. | 103279 (GNB)     | 4/5/96   | Assembly Drawing, G44 Pneumatic  |
| D961198-00-O |                             | WA-S-126, Rev. 0 | 6/26/96  |  |
| D961199-00-O |                             | WA-H-152, Rev. 0 | 7/2/96   |  |
| D961200-00-O |                             | WA-P-511, Rev. 0 | 7/1/96   |  |
| D961201-00-O |                             | WA-E-122, Rev. 0 | 6/27/96  |  |
| D961202-00-V | Process Systems Int'l, Inc. | V049-8-389       | 7/9/96   | General Arrangement: Roughing Pump Cart With Digital Gauge Display (D-4526-1)  |
| E930001-00-B | Rick Prior                  |                  | 12/7/93  | WPS for Outgassing Test Coupons  |
| E930002-00-B | Marty Tellalian             |                  | 12/9/93  | Cleaning Procedure for Outgas Test Coupons, CLCOUP - Rev. 0  |
| E930003-00-B | Ken Flessas                 |                  | 12/10/93 | Weld Coupon Testing, WMS-ER30BL - Rev. 0 and CLCOUP - Rev. 0   |
| E930004-01-B | Ken Flessas                 |                  | 12/14/93 | Cleaning of Welded and Plain Coupons for Outgassing Tests, CLCOUP - Rev. 1   |
| E930005-02-B | Charles Sherlock            |                  | 12/15/93 | Cleaning of Welded and Plain Coupons for Outgassing Tests, CLCOUP - Rev. 2   |
| E930006-03-B | Charles Sherlock            |                  | 12/28/93 | Cleaning of Welded and Plain Coupons for Outgassing Tests, CLCOUP - Rev. 3   |
| E940001-01-C |                             |                  | 11/1/94  | Pre-Stabilized Laser Controls (Subsystem Requirements Specification) (old #CI0001-REQ)   |
| E940002-00-V | John Worden                 |                  | 12/7/94  | Vacuum Equipment Specification-LIGO Facility (Old LIGO #1100003)   |
| E940002-01-V | John Worden                 |                  | 3/28/95  | Vacuum Equipment Specification-LIGO Facility (Old LIGO #1100003), Revision 1.  |
| E940002-02-V | John Worden                 |                  | 8/18/95  | Vacuum Equipment Specification-LIGO Facility (Old LIGO #1100003), Revision 2   |
| E940003-00-B | Conrad Knerr                |                  | 5/31/94  | Dried Inlet Air and FC Outlet DP   |
| E940004-00-M |                             |                  | 10/27/94 | Baseline-1, DRAFT (old #LIGO-1001055)  |
| E940005-01-B | Rick Prior                  |                  | 1/3/94   | Work Order H1137, WPS-WELDCOUP - Rev. 1,   |
| E940006-00-B | Charles Sherlock            |                  | 1/28/94  | Cleaning of Plain Coupons by Alternate Method 0 & 1 for Outgassing Tests, CLCOUPA0 - Draft #1 & CLCOUPA1 - Draft #2  |
| E940007-00-B | Charles Sherlock            |                  | 2/1/94   | Cleaning of Plain Coupons by Alternate Method 0 & 1 for Outgassing Tests, CLCOUPA0 - Draft #2 & CLCOUPA1 - Draft #3  |
| E940008-03-B | Charles Sherlock            |                  | 2/3/94   | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Draft #3  |
| E940009-04-B | Charles Sherlock            |                  | 2/4/94   | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Draft #4  |
| E940010-05-B | Charles Sherlock            |                  | 2/14/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Draft #5  |
| E940011-06-B | Charles Sherlock            |                  | 2/14/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Draft #6  |



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| E940012-00-B | Charles Sherlock    |                 | 2/15/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Rev. 0                                       |
| E940013-00-B | Charles Sherlock    |                 | 2/16/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Rev. 0 (pgs. 1,3,4,7)                        |
| E940014-05-B | Charles Sherlock    |                 | 2/16/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA1 - Draft #5                                     |
| E940015-00-B | Charles Sherlock    |                 | 2/18/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA0 - Rev. 1 & CLCOUPA1 - Rev. 0                   |
| E940016-01-B | Charles Sherlock    |                 | 2/21/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA - Draft #1                                      |
| E940017-00-B | Charles Sherlock    |                 | 2/23/94  | Cleaning of Plain Coupons by Alternate Method 0 for Outgassing Tests, CLCOUPA-Rev. 0, CLCOUPA0-Rev. 2, and CLCOUPA1-Rev. 1    |
| E940018-01-B | Paula Morgan        |                 | 6/7/94   | Cleaning of Outgas Coupons, CLCOUP - Rev. 1& Blacklight Inspection Technique and Solvent Cleaning, BL1N - Rev.1               |
| E940019-03-B | Warren A. Carpenter |                 | 7/11/94  | Coupon Outgassing Test Procedure, COUP-02 - Rev. 3  |
| E940020-04-B | Warren A. Carpenter |                 | 7/22/94  | Coupon Outgassing Test Procedure, COUP-02 - Rev. 4  |
| E940021-05-B | Warren A. Carpenter |                 | 8/10/94  | Coupon Outgassing Test Procedure, COUP-02 - Rev. 5  |
| E940022-00-B | Warren A. Carpenter |                 | 7/12/94  | Qualification Test RGA Location   |
| E940023-00-B | Warren A. Carpenter |                 | 7/14/94  | Qualification Test P&I  |
| E940024-01-B | Warren A. Carpenter |                 | 7/22/94  | Qualification Test Pumpdown and Outgassing Test Procedure, Rev. 1   |
| E940025-01-B | Warren A. Carpenter |                 | 8/2/94   | Qualification Test Pumpdown, Bake Out and Outgassing Test Procedure, Rev. 1   |
| E940026-00-B | Rick Prior          |                 | 6/29/94  | LIGO/Tubetec  |
| E940027-00-B | Rick Prior          |                 | 6/17/94  | WMS-ER308L, Rev. 3 - FOR REVIEW ONLY  |
| E940028-05-B | M. Tellalian        |                 | 11/10/94 | Circumferential Weld Procedure Revision 5   |
| E940029-00-B | M. Tellalian        |                 | 11/21/94 | Cleaning Procedure and Assessment Procedures (CLTEST1, CLBLEED1, CLDROP1, CLSAMP1)  |
| E940030-00-B |                     |                 |          |   |
| E940031-00-B |                     |                 |          |   |
| E940032-00-B |                     |                 |          |   |
| E940033-00-B |                     |                 |          |   |
| E940034-00-B |                     |                 |          |   |
| E940035-00-B |                     |                 |          |   |
| E940036-00-B |                     |                 |          |   |
| E940037-00-B |                     |                 |          |   |
| E940038-00-B |                     |                 |          |   |
| E940039-00-B |                     |                 |          |   |
| E940040-00-B |                     |                 |          |   |
| E940041-00-B |                     |                 |          |   |
| E940042-00-B |                     |                 |          |   |
| E940043-00-B |                     |                 |          |   |
| E950000-00-U |                     |                 | 3/19/96  |   |
| E950001-00-U | Jay Heefner         |                 | 1/10/95  | Rack Specifications   |
| E950002-00-U | Jay Heefner         |                 | 1/10/95  | Rack Specifications   |
| E950003-00-U | Jay Heefner         |                 | 1/10/95  | Rack Specifications   |
| E950004-00-U | Jay Heefner         |                 | 1/23/95  | Rack Specifications   |
| E950005-04-D | Bill Althouse       |                 | 2/27/95  | Design Requirements Review - Prestabilized Laser (PSL) and PSL Controls   |
| E950006-00-B |                     |                 | 3/22/95  | Testing of Concrete Cover for GPS Radio Wave Interference (ALT-GPS)   |
| E950007-00-B | Marty Tellalian     |                 | 1/4/95   | Emergency Procedure Instructions, Outgas Procedure Comments, Baffle Cleaning, Schedule  |
| E950008-00-B | Marty Tellalian     |                 | 1/5/95   | Baffle Cleaning and Support Attachment  |
| E950009-00-B | Marty Tellalian     |                 | 2/15/95  | Monitoring Procedure  |
| E950010-00-B | James A. Johnson    |                 | 3/14/95  | Bellows design calculations   |
| E950011-00-B | L. Reed             |                 | 4/10/95  | Cleaned ER308L Filler Material Specification (WMS-ER308L, Rev. 3)   |
| E950012-00-D | Rick Savage         |                 | 1/27/95  | Technical Specifications - Pathfinder Substrate (old #1207051)  |
| E950012-01-D | Rick Savage         |                 | 1/27/95  | Technical Specifications - Pathfinder Substrate (old #1207051) - Wedge Angle changed to 2 degrees                             |
| E950013-0B-B | Larry Jones         |                 |          | Process Specification for Low Hydrogen, Type 304L Stainless Steel Vacuum Products (old Spec. #1100007, dated 5/17/94 - rev. a |
| E950013-B-B  | Larry Jones         |                 |          |   |
| E950014-00-D | Janeen Hazel        |                 | 4/26/95  | Wedge Angle Changes for Test Mass/Ligo Pathfinder (D950020, Rev. B)   |
| E950015-0F-B | Larry Jones         |                 |          | Beam Tube Module Specification (old Spec. #1100004, dated 5/17/94 - rev. E)   |
| E950015-F-B  | Larry Jones         |                 |          |   |
| E950016-00-B | Larry Jones         |                 | 5/11/95  | Service Road Width  |
| E950017-00-I | Rick Savage         |                 | 5/15/95  | Core Optics Components Interface Definitions  |
| E950018-00-E | Albert Lazzarini    |                 | 5/17/95  | LIGO Science Requirements Document (SRD)  |
| E950018-00-E | Rai Weiss           |                 | 5/17/95  | LIGO Science Requirements Document (SRD)  |
| E950019-00-O | Rai Weiss           |                 | 2/27/95  | Beam Tube Enclosure: Functions and Requirements (A discussion document)   |
| E950020-00-B | Larry Jones         |                 | 5/22/95  | LIGO Beam Tube Module Requirements  |

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|--------------|-------------------------|-----------------|---------|--|
| E950021-00-B | Rai Weiss               |                 | 5/22/95 | Beam Tube Module Leak Localization Concepts  |
| E950022-02-B |                         |                 | 5/23/95 | Beam Tube Material Specification   |
| E950023-03-B |                         |                 | 5/23/95 | Coil Material Bake Specification   |
| E950024-04-B |                         |                 | 5/23/95 | Cleaned ER308L Filler Material Specification   |
| E950025-01-B |                         |                 | 5/23/95 | LIGO Beam Tube Sections, Construction Option   |
| E950026-02-B |                         |                 | 5/23/95 | LIGO Beam Tube Expansion Joints, Construction Option   |
| E950027-03-B |                         |                 | 5/23/95 | Vacuum Stiffener Fabrication Specification   |
| E950028-02-B |                         |                 | 5/23/95 | Beam Tube Support Specification  |
| E950029-03-B |                         |                 | 5/23/95 | Support Ring Fabrication Specification   |
| E950030-04-B |                         |                 | 5/23/95 | Pump Port Fabrication Specification, Construction Option   |
| E950031-04-B |                         |                 | 5/23/95 | Pump Port Reinforcing Pad Fabrication Specification  |
| E950032-15-B |                         |                 | 5/23/95 | General Welding Procedure SMAW   |
| E950033-14-B |                         |                 | 5/23/95 | General Welding Procedure GTAW   |
| E950034-15-B |                         |                 | 5/23/95 | General Welding Procedure GMAW & FCAW  |
| E950035-05-B |                         |                 | 5/23/95 | Welding Procedure for Expansion Joint to Beam Tube Can Assemblies  |
| E950036-04-B |                         |                 | 5/23/95 | Welding Procedure for Stiffener to Beam Tube Cans  |
| E950037-04-B |                         |                 | 5/23/95 | Welding Procedure for 10" Vacuum Port Nozzle to Beam Can Assemblies                                      |
| E950038-02-B |                         |                 | 5/23/95 | Weld Procedure, GMA Welding for 304L Materials   |
| E950039-01-B |                         |                 | 5/23/95 | Weld Procedure, GMA for Repair Welding for 304L Materials  |
| E950040-00-B |                         |                 | 5/23/95 | Welding Procedure for Structural (Carbon to Carbon)  |
| E950041-01-B |                         |                 | 5/23/95 | Welding Procedure for Structural (Stainless to Stainless)  |
| E950042-00-B |                         |                 | 5/23/95 | Welding Procedure for Structural (Carbon to Stainless)   |
| E950043-00-B |                         |                 | 5/23/95 | Welding Procedure for Structural (Carbon to Carbon)  |
| E950044-00-B |                         |                 | 5/23/95 | Welding Procedure for Structural (Carbon to Carbon)  |
| E950045-01-B |                         |                 | 5/23/95 | Storage and Care of Welding Consumables  |
| E950046-02-B |                         |                 | 5/23/95 | General Repair Procedure for Materials and Welds   |
| E950047-02-B |                         |                 | 5/23/95 | Plate Clean-Up Procedure for Tube Modules  |
| E950048-02-B |                         |                 | 5/23/95 | Beam Tube Can Section Fabrication Sequence   |
| E950049-02-B |                         |                 | 5/23/95 | Beam Tube Can Section Installation Sequence  |
| E950050-04-B |                         |                 | 5/23/95 | Fitting/Purge Procedure for Circumferential Butt Welds   |
| E950051-04-B |                         |                 | 5/23/95 | Fitting/Purge Procedure for Stiffener Attachment Welds   |
| E950052-04-B |                         |                 | 5/23/95 | Fitting/Purge Procedure for Pump Port Attachment Welds   |
| E950053-01-B |                         |                 | 5/23/95 | Clean Room Transporting, Storage and Maintenance Procedure   |
| E950054-02-B |                         |                 | 5/23/95 | Positive Blower/Dryer/Filtration System (BDF) Installation and Maintenance                               |
| E950055-00-B |                         |                 | 5/23/95 | Receipt Inspection   |
| E950056-01-B |                         |                 | 5/23/95 | Dimensional Control Procedure  |
| E950057-01-B |                         |                 | 5/23/95 | Final Alignment and Module Testing Sequence  |
| E950058-00-B |                         |                 | 5/23/95 | Visual Inspection Procedure  |
| E950059-01-B |                         |                 | 5/23/95 | Visual Inspection Requirements for Beam Tube and Components  |
| E950060-02-B |                         |                 | 5/23/95 | Blacklight Inspection Technique  |
| E950061-03-B |                         |                 | 5/23/95 | Cleaning of Outgas Coupons   |
| E950062-01-B |                         |                 | 5/23/95 | Cleaning of Beam Tube Can Sections   |
| E950063-01-B |                         |                 | 5/23/95 | Contamination Control for Construction Activities During Beam Tube Installation                          |
| E950064-01-B |                         |                 | 5/23/95 | Final Cleaning & Inspection of Beam Tube Module Inner Surfaces   |
| E950065-00-B |                         |                 | 5/23/95 | Clean Room Wearing Apparel for Beam Tube Access during Construction Inspection Activity                  |
| E950066-01-B |                         |                 | 5/23/95 | Helium Mass Spectrometer Hood Test of Beam Tube Can Sections   |
| E950067-01-B |                         |                 | 5/23/95 | Helium Mass Spectrometer Hood Test of Closing Weld Joints Between Beam Tube Cans                         |
| E950068-01-B |                         |                 | 5/23/95 | Helium Mass Spectrometer Hood Test of Pump Ports with Valve, LN2 Pump and Blind Flange with RGA Assembly |
| E950069-00-B |                         |                 | 5/23/95 | RGA Performance Test of Beam Tube Module   |
| E950070-01-B |                         |                 | 5/23/95 | Helium Mass Spectrometer Hood Test of Beam Tube Module   |
| E950071-00-B |                         |                 | 5/23/95 | Leak Test Decision Tree  |
| E950072-02-B |                         |                 | 5/23/95 | Coupon Outgassing Test Procedure Option Phase  |
| E950073-04-B |                         |                 | 5/23/95 | Initial and Final Alignment During Installation of LIGO Beam Tube Modules Using GPS System               |
| E950074-02-B |                         |                 | 5/23/95 | Procedure for Alignment Maintenance Using the Global Positioning System (GPS) Technique                  |
| E950075-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| E950076-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| E950077-00-U | McMaster-Carr Supp. Co. |                 |         |  |

| Document No  | Full Name                 | ContractorDocNo    | Doc Dt   | Full Title   |
|--------------|---------------------------|--------------------|----------|--|
| E950078-00-U | McMaster-Carr Supp. Co.   |                    |          |  |
| E950079-00-U | McMaster-Carr Supp. Co.   |                    |          |  |
| E950080-00-U | McMaster-Carr Supp. Co.   |                    |          |  |
| E950081-00-E | Alex Abramovici           |                    | 7/18/95  | ND: YAG Laser Specifications   |
| E950081-01-I | Alex Abramovici           |                    | 8/16/95  | ND: YAG Laser Specifications   |
| E950081-02-I | Alex Abramovici           |                    | 8/18/95  | ND: YAG Laser Specifications   |
| E950081-03-I | Alex Abramovici           |                    | 11/27/95 | Nd3+ Laser Specifications  |
| E950081-03-I | David Shoemaker           |                    | 11/27/95 | Nd3+ Laser Specifications  |
| E950081-04-I | Alex Abramovici           |                    | 1/4/96   | Nd3+ Laser Specifications  |
| E950081-04-I | David Shoemaker           |                    | 1/4/96   | Nd3+ Laser Specifications  |
| E950081-05-I | David Shoemaker           |                    | 4/24/96  | Nd3+ Laser Target Specifications   |
| E950081-05-I | Alex Abramovici           |                    | 4/24/96  | Nd3+ Laser Target Specifications   |
| E950082-00-E | R. Breault                |                    | 7/18/95  | LIGO Baffle Material Search  |
| E950083-00-E | Albert Lazzarini          |                    | 7/21/95  | LIGO Beam Tube Baffles Requirements Document   |
| E950084-00-E |                           |                    | 7/21/95  | LIGO System Specification  |
| E950085-00-E | Albert Lazzarini          |                    | 9/27/95  | LIGO Requirements and Specifications Document Tree                                       |
| E950085-A-D  | Mike Zucker               |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Bill Althouse             |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Jordan Camp               |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Peter Fritschel           |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Albert Lazzarini          |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Rick Savage               |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | V. Schmidt                |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | David Shoemaker           |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Robert Spero              |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950085-A-D  | Stan Whitcomb             |                    | 9/2/95   | Design Requirements Review - Suspension  |
| E950086-A-D  | Proposal Review Committee |                    | 9/28/95  | LIGO Detector Subsystem Review Report on Preliminary Design Review of the PSL            |
| E950087-A-D  | Bill Althouse             |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Rai Weiss                 |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Robert Spero              |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | V. Schmidt                |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Rick Savage               |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Seiji Kawamura            |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Jordan Camp               |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Stan Whitcomb             |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950087-A-D  | Peter Fritschel           |                    | 9/28/95  | LIGO Detector Subsystem Review Report Design Requirements Review ASC                     |
| E950088-00-E | Albert Lazzarini          |                    | 9/28/95  | Interface Control Document: Vacuum Equipment-Civil Construction                          |
| E950088-00-E | Dennis Coyne              |                    | 9/28/95  | Interface Control Document: Vacuum Equipment-Civil Construction                          |
| E950088-01-E | Dennis Coyne              |                    | 11/2/95  | Interface Control Document (ICD): Vacuum Equipment (VE) - Civil Construction (CC)        |
| E950088-01-E | Albert Lazzarini          |                    | 11/2/95  | Interface Control Document (ICD): Vacuum Equipment (VE) - Civil Construction (CC)        |
| E950088-03-E | Dennis Coyne              |                    | 1/10/96  | Interface Control Document (ICD): Vacuum Equipment (VE) - Civil Construction (CC)        |
| E950088-03-E | Albert Lazzarini          |                    | 1/10/96  | Interface Control Document (ICD): Vacuum Equipment (VE) - Civil Construction (CC)        |
| E950089-00-E | Albert Lazzarini          |                    | 11/28/95 | Interface Control Document (ICD): Beam Tube (BT) - Civil Construction (CC)               |
| E950089-00-E | Dennis Coyne              |                    | 11/28/95 | Interface Control Document (ICD): Beam Tube (BT) - Civil Construction (CC)               |
| E950089-01-E | Albert Lazzarini          |                    | 11/13/95 | Interface Control Document (ICD): Beam Tube (BT) - Civil Construction (CC), Final Draft  |
| E950089-01-E | Dennis Coyne              |                    | 11/13/95 | Interface Control Document (ICD): Beam Tube (BT) - Civil Construction (CC), Final Draft  |
| E950090-00-E | Dennis Coyne              |                    | 3/29/95  | Interface Control Document (ICD): LIGO System & Detector (DET) - Civil Construction (CC) |
| E950092-00-E | Albert Lazzarini          |                    | 1/2/96   | Interface Control Document (ICD): Beam Tube (BT) - Vacuum Equipment (VE)                 |
| E950092-00-E | Dennis Coyne              |                    | 1/2/96   | Interface Control Document (ICD): Beam Tube (BT) - Vacuum Equipment (VE)                 |
| E950095-00-B | Larry Jones               | V049-2-005, Rev. 0 | 11/13/95 | PSI's Specification for 112cm and 122cm Gate Valves                                      |
| E950098-00-E | Allen Sibley              |                    | 12/26/95 | Operations Support Building (OSB) Requirements   |
| E950098-A-F  | Allen Sibley              |                    | 12/19/95 | Operations Support Building (OSB) Requirements   |
| E950101-00-E | Albert Lazzarini          |                    | 11/29/95 | Telecommunications Requirements for Hanford, WA Site                                     |
| E950102-01-B | Marty Tellalian           | EQT                | 11/30/95 | CBI Equipment Qualification Test for the LIGO Beam Tube Modules                          |
| E950103-00-B | Larry Jones               |                    | 12/14/95 | Hanford Beam Tube Enclosure Construction Bid Package of 21 November 1995                 |
| E950104-00-D | Garilynn Billingsley      |                    | 12/15/95 | Polishing Specification, Pathfinder  |
| E950105-00-B | Larry Jones               |                    | 12/20/95 | Beam Tube Termination Foundation: Loads Update   |

| Document No  | Full Name            | ContractorDocNo     | Doc Dt   | Full Title   |
|--------------|----------------------|---------------------|----------|--|
| E950106-00-E | Albert Lazzarini     |                     | 12/26/95 | LIGO Requirements and Options for Facilities Monitoring and Control Systems (FMCS)                   |
| E950106-00-E | Dennis Coyne         |                     | 12/26/95 | LIGO Requirements and Options for Facilities Monitoring and Control Systems (FMCS)                   |
| E950107-00-E | Albert Lazzarini     |                     | 12/23/95 | LIGO Foundation Thickness Decision: Minutes of Integration Meeting on 8 December 1995                |
| E950108-00-E | Albert Lazzarini     |                     | 12/27/95 | LIGO Configuration Change to Nd:YAG Lasers: Impact on Facilities Chiller Requirements                |
| E950116-00-B | Larry Jones          |                     | 12/27/95 | CBI's Pump Port Positioning Accuracy   |
| E950117-00-B | Lance Buboltz        |                     | 12/14/95 | Spiral Weld Pipe Mill Specification  |
| E950118-00-V | Richard Bagley       | BOMV0494001         | 11/28/95 | Bill of Material for BSC Prototype   |
| E950119-00-V | Dick Curtis          | V049-2-039          | 11/28/95 | Specifications for Stainless Steel Vessel Heads for LIGO Vacuum Equipment, Hanford and Livingston    |
| E950120-00-V | Dick Curtis          | V049-2-040          | 11/28/95 | Specifications for Stainless Steel Flange Forgings for LIGO Vacuum Equipment, Hanford and Livingston |
| E950120-02-V | Richard Bagley       | V049-2-040, Rev. 2  | 3/18/96  | Specifications for Stainless Steel Flange Forgings for LIGO Vacuum Equipment, Hanford and Livingston |
| E950121-00-V | Dick Curtis          | V049-2-041          | 11/28/95 | Specifications for Stainless Steel Vessel Plate for LIGO Vacuum Equipment, Hanford and Livingston    |
| E960001-00-V | Richard Bagley       |                     | 1/10/96  | Specification for Clean Air Supply Systems, Revision 0   |
| E960002-00-V | Richard Bagley       | V049-2-010, Rev. 0  | 1/10/96  | Specification for Portable Soft-Walled Cleanroom, Revision 0   |
| E960003-02-V | Richard Bagley       | V049-2-009, Rev. P2 | 1/22/96  | Specification for Bakeout Blanket System for the Vacuum Equipment                                    |
| E960004-02-V | Richard Bagley       | V049-2-001, Rev. 2  | 1/8/96   | Specification for Roughing Pump Carts for the Vacuum Equipment, Revision 2                           |
| E960005-03-V | Richard Bagley       | V049-2-002, Rev. 3  | 1/8/96   | Specification for Main Turbomolecular Carts for the Vacuum Equipment, Revision 3                     |
| E960006-02-V | Richard Bagley       | V049-2-003          | 1/8/96   | Specification for Auxilliary Turbomolecular Carts for the Vacuum Equipment, Revision 2               |
| E960007-02-V | Richard Bagley       | V049-2-033, Rev. 2  | 1/8/96   | Specification for General Equipment Requirements for the Vacuum Equipment, Revision 2                |
| E960008-00-V | Richard Bagley       | V049-2-037, Rev. 0  | 1/22/96  | Specification for Piping Design and Material for the Vacuum Equipment, Revision 0                    |
| E960019-00-B | Larry Jones          |                     | 2/6/96   | Request for Design Check: Valve Soft Support   |
| E960021-00-E | Garilynn Billingsley |                     | 2/16/96  | Handling LIGO Optics Containers  |
| E960022-00-D | William Young        |                     | 2/26/96  | LIGO Vacuum Compatibility, Cleaning Methods and Procedures   |
| E960024-00-P |                      |                     | 3/29/96  | Document Change Notice (DCN) for LIGO-D950021-C-E  |
| E960026-A-D  | Kent Blackburn       |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Mark Coles           |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | David Shoemaker      |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Robert Spero         |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Mike Zucker          |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Fred Raab            |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Dennis Coyne         |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960026-A-D  | Bill Althouse        |                     | 4/23/96  | LIGO Detector Subsystem Review Report - Design Requirements Review CDS Control and Monitoring        |
| E960027-00-D | Robert Spero         |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | David Shoemaker      |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Mike Zucker          |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Rai Weiss            |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Albert Lazzarini     |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Seiji Kawamura       |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Peter Fritschel      |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960027-00-D | Jordan Camp          |                     | 5/15/96  | Report on the Design Requirements Review Core Optics Components                                      |
| E960028-00-B |                      |                     | 3/18/96  | LIGO Specification for Porcelain Coating of Beam Tube Baffles  |
| E960028-A-B  | Allen Sibley         |                     | 4/1/96   | Specification for Porcelain Coating of Beam Tube Baffles   |
| E960032-00-P | Joanne Whitaker      |                     | 3/13/96  | Quality Assurance Procedures from JPL  |
| E960034-01-V | Richard Bagley       | V049-2-004, Rev. 1  | 2/29/96  | Specification for Ion Pumps for Vacuum Equipment - Hanford and Livingston                            |
| E960036-00-E | William Parker       |                     | 4/10/96  | LIGO EMI Control Plan and Procedures.  |
| E960036-02-E | Albert Lazzarini     |                     | 6/7/96   | LIGO EMI Control Plan and Procedures   |
| E960036-02-E | Dennis Coyne         |                     | 6/7/96   | LIGO EMI Control Plan and Procedures   |
| E960037-A-B  | Allen Sibley         |                     | 5/8/96   | Component Specification - Mechanical Fabrication of Beam Tube Baffles                                |
| E960038-A-B  | Allen Sibley         |                     | 5/8/96   | Document Change Notice   |
| E960039-00-B | Larry Jones          |                     | 4/12/96  | Document Change Notice (DCN)   |
| E960040-00-B | Larry Jones          |                     | 4/12/96  | Document Change Notice (DCN)   |
| E960041-00-B | Larry Jones          |                     | 4/29/96  | Beam Tube Contract Material Escalation Text Update Proposal.   |
| E960042-00-D | Rick Savage          |                     | 5/2/96   | Specifications for Power Sampling Photodetector Intended for Use with the NPRO-PSL                   |
| E960042-00-D | Alex Abramovici      |                     | 5/2/96   | Specifications for Power Sampling Photodetector Intended for Use with the NPRO-PSL                   |
| E960043-01-D | Alex Abramovici      |                     | 5/8/96   | Specifications for SLOW/FAST Controller Intended for Use with the NPRO-PSL                           |
| E960043-01-D | Rick Savage          |                     | 5/8/96   | Specifications for SLOW/FAST Controller Intended for Use with the NPRO-PSL                           |
| E960045-00-D | Alex Abramovici      |                     | 5/2/96   | Specifications for Power Stabilization Amplifier Intended for Use with the NPRO-PSL                  |
| E960045-00-D | Rick Savage          |                     | 5/2/96   | Specifications for Power Stabilization Amplifier Intended for Use with the NPRO-PSL                  |

| Document No   | Full Name            | ContractorDocNo | Doc Dt  | Full Title   |
|---------------|----------------------|-----------------|---------|--|
| E960048-00-D  | Rick Savage          |                 | 5/2/96  | Specifications for Power Sampling PD Bias Supply Intended for Use with the NPRO-PSL  |
| E960048-00-D  | Alex Abramovici      |                 | 5/2/96  | Specifications for Power Sampling PD Bias Supply Intended for Use with the NPRO-PSL  |
| E960051-A-V   | Dennis Coyne         |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960051-A-V   | A. Kuhnert           |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960051-A-V   | Ben Lucas            |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960051-A-V   | Allen Sibley         |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960051-A-V   | Rai Weiss            |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960051-A-V   | Bill Althouse        |                 | 6/9/96  | LIGO Vacuum Equipment Subsystem Review Report - Design Requirements Review, Vacuum Control and Monitoring System (VCMS)  |
| E960089-00-B  | Paul McGrath         |                 | 5/10/96 | Welding Procedure for Resistance Spot Welding of LIGO Beam Tube Baffles  |
| E960091-00-B  | Larry Jones          |                 | 6/5/96  | Quarterly Report: Beam Tube, 3/96-5/96   |
| E960094-00-D  | Garilynn Billingsley |                 | 4/1/96  | Mirror Blank Material, Beam Splitter.  |
| E960095-00-D  | Garilynn Billingsley |                 | 4/1/96  | Mirror Blank Material, Input Test Mass.  |
| E960096-00-D  | Garilynn Billingsley |                 | 4/1/96  | Mirror Blank Material, Recycling Mirror.   |
| E960097-00-D  | Garilynn Billingsley |                 | 4/1/96  | Mirror Blank Material, Folding Mirror, End Test Mass.  |
| E960099-00-E  | Milena Krasich       |                 | 6/12/96 | LIGO Reliability Program Plan  |
| E960104-00-E  | Allen Sibley         |                 | 4/25/96 | Document Change Notice (DCN)   |
| E960105-00-E  | Larry Jones          |                 | 7/5/96  | Beam Tube Alignment  |
| G900086-00-A  |                      |                 | 6/28/96 | This is a test for Cleveland's computer  |
| G901111-A-E   |                      |                 | 9/25/95 | This is a text field that allows us to have very long titles that will wrap on the screen without having to define the field as a memo. Since the field is 255 characters long, we can set it up as an indexed field and still see the entire field on the |
| G940001-00-O  | Fred Asiri           |                 | 9/20/94 | Conventional Facilities - Design Overview and Sites Status   |
| G940002-00-D  | David Shoemaker      |                 | 4/20/94 | Sensitivity Limits Due to Photon Statistics - Shot Noise, Other 'Optical' Noise Sources, and Optical Configurations  |
| G95-0030-00-C |                      |                 |         | Test document  |
| G950000-00-U  |                      |                 | 5/23/96 |  |
| G950001-00-M  | Gary Sanders         |                 | 2/14/95 | LIGO Administrative Group - Basic Organization and Procedures  |
| G950002-00-M  | Barry Barish         |                 | 3/10/95 | LIGO All Hands Meeting   |
| G950003-00-F  |                      |                 | 3/13/95 | Hanford Site Photo Album   |
| G950004-00-F  |                      |                 | 3/13/95 | Livingston Site Photo Album  |
| G950005-00-F  |                      |                 | 3/13/95 | Hanford Site Video   |
| G950006-00-F  |                      |                 | 3/13/95 | Livingston Site Video  |
| G950007-00-M  | Gary Sanders         |                 | 1/4/95  | LIGO All Hands Meeting   |
| G950008-00-V  | J. Stapfer           |                 | 3/16/95 | Presentation to NSF for Vacuum Equipment Procurement Approval  |
| G950009-00-V  | John Worden          |                 | 4/28/95 | Presentation to CBI/PSI for Vacuum Equipment Phase A Update Meeting  |
| G950010-00-V  | John Worden          |                 | 3/30/95 | Kickoff Meeting - Vacuum Equipment Phase A   |
| G950011-00-V  | Mike Zucker          |                 | 3/30/95 | LIGO Vacuum Equipment Scientific Requirements Overview   |
| G950012-01-M  | Gary Sanders         |                 | 2/1/95  | LIGO Project Organization - (file type:opx)  |
| G950013-01-M  | Gary Sanders         |                 | 2/1/95  | LIGO Project Organization - (file type:tiff)   |
| G950014-01-M  | Gary Sanders         |                 | 2/1/95  | LIGO Project Organization - (file type:wmf)  |
| G950015-01-M  | Gary Sanders         |                 | 2/1/95  | Organizational Hierarchy - (file type:opx)   |
| G950016-01-M  | Gary Sanders         |                 | 2/1/95  | Organizational Hierarchy - (file type:wmf)   |
| G950017-01-M  | Gary Sanders         |                 | 2/1/95  | LIGO Work Breakdown Structure (file type:opx)  |
| G950018-01-M  | Gary Sanders         |                 | 2/1/95  | LIGO Work Breakdown Structure (file type:wmf)  |
| G950019-01-D  | Robbie Vogt          |                 | 5/22/95 | LIGO Detector Presentation   |
| G950020-00-M  | Gary Sanders         |                 | 5/17/95 | LIGO Progress, Status and Plans  |
| G950021-00-M  | Gary Sanders         |                 | 5/17/95 | User's Community Advisory Committee  |
| G950022-00-F  | Fred Asiri           |                 | 5/22/95 | Civil Construction Presentation  |
| G950023-00-E  | Albert Lazzarini     |                 | 5/22/95 | LIGO Systems Engineering and Integration Presentation  |
| G950024-00-P  | Phil Lindquist       |                 | 5/18/95 | Project Management Control Systems Presentation  |
| G950025-00-V  | John Worden          |                 | 5/18/95 | Vacuum Equipment Viewgraphs NSF Presentation   |
| G950026-00-B  | Larry Jones          |                 | 5/22/95 | Beam Tube Modules Presentation   |
| G950027-00-M  | Fred Raab            |                 | 5/19/95 | Plan to Commission and Operate LIGO  |
| G950028-00-M  | Barry Barish         |                 | 5/19/95 | Project Introduction and Management  |
| G950029-00-F  | Gerry Stapfer        |                 | 5/19/95 | Facilities   |
| G950030-00-R  | Stan Whitcomb        |                 | 5/25/95 | Some Thoughts on Scattered Light in the Corner Station   |
| G950031-00-P  | Phil Lindquist       |                 | 5/22/95 | Other Project Control Systems Presentation   |
| G950032-00-D  | Rick Savage          |                 | 5/24/95 | Status Review of the Core Optics Components  |
| G950033-00-M  |                      |                 | 5/22/95 | Complete NSF Presentation (Agenda, Acronyms, Presentations, etc.)  |
| G950034-00-D  | Seiji Kawamura       |                 | 5/25/95 | Suspension Design for LIGO and the 40m Interferometer  |

| Document No  | Full Name                     | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------------|-----------------|----------|---|
| G950035-00-C | V. Schmidt                    |                 | 5/23/95  | CDS Overview  |
| G950036-00-U | Lisa Sievers                  |                 | 5/25/95  | Length Control Modeling   |
| G950037-00-U | Nergis Mavalvala              |                 | 5/25/95  | Interferometer Design Considerations  |
| G950038-00-U | Albert Lazzarini              |                 | 5/25/95  | LIGO Science Requirements Document  |
| G950039-00-U | Rai Weiss                     |                 | 5/25/95  | Baffle Research   |
| G950040-00-U | Albert Lazzarini              |                 | 5/25/95  | Mounting Approach   |
| G950041-00-U | John Worden                   |                 | 5/25/95  | Vacuum Equipment Interfaces   |
| G950042-00-U | Fred Asiri                    |                 | 5/25/95  | Facility Interface with Detector, Vacuum Equipment and Beam Tube  |
| G950043-00-U | Hiro Yamamoto                 |                 | 5/25/95  | HR Coating, AR Coating and Dual-Wavelength-Ready Coating  |
| G950044-00-U | Kent Blackburn                |                 | 5/25/95  | Support to 40 Meter: Data Analysis and Visualization with AVS   |
| G950045-00-D | S.Kawamura                    |                 | 6/8/95   | Suspension Design Requirements Review for 8 June 1995   |
| G950045-00-U | G. Gonzalez                   |                 | 5/25/95  | Barry Controls Active Isolators (STACIS)  |
| G950046-00-R | Seiji Kawamura                |                 | 6/22/95  | Suspension Design for the 40m Interferometer  |
| G950046-00-U | Peter Fritschel               |                 | 5/25/95  | Barry Controls Isolators: Are they Useful to LIGO?  |
| G950047-00-E | Albert Lazzarini              |                 | 6/29/95  |   |
| G950047-00-U | Kent Blackburn                |                 | 5/25/95  | Support to 40 Meter: Data Analysis and Visualization with AVS   |
| G950048-00-U | Alex Abramovici               |                 | 5/25/95  | Where Should the Pocket Cells Be?   |
| G950049-00-U | Mike Zucker                   |                 | 5/25/95  | Core Optic Wedges   |
| G950050-00-U | G. Gonzalez                   |                 | 5/25/95  | Barry Controls Active Isolators (STACIS)  |
| G950051-00-U | Peter Fritschel               |                 | 5/25/95  | Barry Controls Isolators: Are they Useful for LIGO?   |
| G950052-00-O | McMaster-Carr Supp. Co.       |                 | 7/6/95   |   |
| G950053-00-V |                               |                 | 7/20/95  | Vacuum Equipment Phase B Selection Presentation to Review Panel   |
| G950054-00-M | Gary Sanders                  |                 | 8/1/96   | Status of LIGO - Presentation at GR14 Conference in Florence, Italy in August 1995                        |
| G950055-00-V |                               |                 | 8/1/95   | Vacuum Equipment CAD Pictures   |
| G950056-00-B |                               |                 | 8/1/95   | Beam Tube Photographs   |
| G950057-00-M |                               |                 | 8/9/95   | Video of Louisiana Ground Breaking Ceremony, 5 July 1995  |
| G950058-00-E | Alex Abramovici               |                 | 8/14/95  | Presentation on Impact of Replacing Argon Lasers with Nd:YAG Lasers                                       |
| G950058-00-E | David Shoemaker               |                 | 8/14/95  | Presentation on Impact of Replacing Argon Lasers with Nd:YAG Lasers                                       |
| G950059-00-M | Gary Sanders                  |                 | 8/21/95  | GR14 Sack Lunch Viewgraphs  |
| G950060-00-V | Mark Coles                    |                 | 8/25/95  | Vacuum Equipment Procurement Presentation to the NSF  |
| G950061-00-R | Gabriela Gonzalez             |                 | 8/28/95  | A Summary and Future Preview of the FFT Simulation Initiative at LIGO                                     |
| G950062-00-F | Mark Coles                    |                 | 9/13/95  | Facilities Overview and Status - Presentation to NSF  |
| G950063-00-R | Stan Whitcomb                 |                 | 9/15/95  | International Symposium on "Modern Problems of Laser Physics" held in Russia, August 28-September 2, 1995 |
| G950064-00-P | Phil Lindquist                |                 | 9/19/95  |   |
| G950065-00-M | Dennis Coyne                  |                 | 9/21/95  | Interfaces  |
| G950066-00-E |                               |                 | 9/28/95  | Viewgraphs/Presentations from Science Integration Meeting, 21-22 Sept 1995                                |
| G950067-00-M | Gary Sanders                  |                 | 9/28/95  | Project Implementation  |
| G950068-00-D |                               |                 | 9/29/95  | LIGO Detector Group NSF Technical Review Documentation Package  |
| G950069-00-V | John Worden                   |                 | 7/21/95  | Vacuum Equipment Review   |
| G950070-00-M | Peter Saulson                 |                 | 7/28/95  | Transparencies from Seminars by Professor Peter Saulson on 7/19,20,26/95                                  |
| G950071-00-O | Fred Asiri                    |                 | 10/3/95  | Viewgraphs  |
| G950072-00-O |                               |                 | 10/4/95  | Otto  |
| G950073-00-R | Janeen Hazel                  |                 | 10/4/95  | New Suspension for Mark II  |
| G950073-00-R | Seiji Kawamura                |                 | 10/4/95  | New Suspension for Mark II  |
| G950073-00-R | Jay Heefner                   |                 | 10/4/95  | New Suspension for Mark II  |
| G950074-00-V | Mike Zucker                   |                 | 10/9/95  | Vacuum Equipment Science Requirements   |
| G950075-00-V | Mike Zucker                   |                 | 10/10/95 | Technical Updates to Vacuum Equipment Design  |
| G950076-00-R | David Shoemaker               |                 | 10/4/95  | R & D Overview Presentation   |
| G950077-00-D | Bill Althouse                 |                 | 10/4/95  | Detector Review Presentation  |
| G950077-00-D | Robert Spero                  |                 | 10/4/95  | Detector Review Presentation  |
| G950077-00-D | Robbie Vogt                   |                 | 10/4/95  | Detector Review Presentation  |
| G950078-00-M | California Institute of Tech. |                 | 10/4/95  | Viewgraphs of NSF Review Presentation   |
| G950079-00-R | California Institute of Tech. |                 | 1/6/95   | Review of LIGO Baffle Design and Light Scattering in the Beam Tube  |
| G950080-00-E | Albert Lazzarini              |                 | 10/5/95  | NSF Presentation  |
| G950081-00-F | Mark Coles                    |                 | 10/5/95  | NSF Presentation  |
| G950082-00-B | Larry Jones                   |                 | 10/5/95  | Beam Tube Modules   |
| G950082-00-B | Rai Weiss                     |                 | 10/5/95  | Beam Tube Modules   |

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| G950083-00-V | John Worden              |                 | 10/5/95  | NSF Presentation  |
| G950084-00-R | Stan Whitcomb            |                 | 10/5/95  | Change to Nd:YAG Lasers   |
| G950085-00-M | Barry Barish             |                 | 10/6/95  | LIGO Overview   |
| G950086-00-O | Jeff Hermann             |                 | 10/6/95  | Civil Information from Parsons for NSF Presentation Review  |
| G950090-00-O | Paul MacCalden           |                 | 10/26/95 | LIGO Facilities Performance Predictions Review Meeting, 26 October 1995   |
| G950090-00-O | Rick Savage              |                 | 10/26/95 | LIGO Facilities Performance Predictions Review Meeting, 26 October 1995   |
| G950091-00-O | Yolande Middleton        |                 | 11/3/95  | Livingston Site Photographs   |
| G950093-00-F | Larry Jones              |                 | 11/17/95 | Beam Tube Source Selection Presentation   |
| G950095-00-D | David Shoemaker          |                 | 11/14/95 | ASC Optical Lever Design Requirements Review  |
| G950095-00-D | John Tappan              |                 | 11/14/95 | ASC Optical Lever Design Requirements Review  |
| G950095-20-O | Ralph M. Parsons Company |                 | 5/21/96  | Southeast Arm at Station 110+00 Showing Two Excavators Removing Fill From Trench and a Dozer Spreading Fill Into Place.             |
| G950095-21-O |                          |                 | 5/21/96  | Southeast Arm at Station 112+00 Showing Grader Wind Rowing Soil to Expedite the Drying Process.                                     |
| G950096-00-F | Larry Jones              |                 | 11/30/95 | Beam Tube Contract - Presentation to the NSF  |
| G950098-00-R | Stan Whitcomb            |                 | 11/29/95 | Searching for Gravitational Waves with LIGO (Presentation at Notre Dame) - Viewgraphs   |
| G950099-00-M |                          |                 | 11/28/95 | Laser Safety - Course Overheads   |
| G950100-00-M | Felix Fernandez          |                 | 12/15/95 | LIGO - the Evolution of a Project Management Process  |
| G950100-00-M | Mark Patlan              |                 | 12/15/95 | LIGO - the Evolution of a Project Management Process  |
| G950102-00-M | Barry Barish             |                 | 9/28/95  | The Search for Gravitational Waves - Presented at Lockheed, Palo Alto on 28 September 1995  |
| G950103-00-M | Barry Barish             |                 | 12/8/95  | Gravitational Waves - Presented at Yale University, 8 December 1995   |
| G950104-00-M | Barry Barish             |                 | 5/22/95  | LIGO Organization and Managment   |
| G950105-00-M | Barry Barish             |                 | 10/9/95  | LIGO Overview - NSF Technical Review, 9-11 October 1995   |
| G950106-00-M | Barry Barish             |                 | 10/2/95  | LIGO Status Report, dated 2 October 1995  |
| G950142-01-O | Ralph M. Parsons Company |                 | 5/7/96   | Southwest Arm at Station 36+00 Looking Southwest at Trench Excavation and Spectators.   |
| G952000-00-M | David Shoemaker          |                 | 5/22/95  | R & D Overview Presentation   |
| G952001-00-B | Rai Weiss                |                 | 5/22/95  | Beam Tube Qualification Test Results (Framemaker viewgraphs) Presentation   |
| G952002-00-M | David Shoemaker          |                 | 5/26/95  | Argon and Nd: YAG Lasers: Comparative Information   |
| G952003-00-R | David Shoemaker          |                 | 6/1/95   | Barry Controls STACIS Isolators: Their performance at MIT and Considerations for Their Use in LIGO                                  |
| G952004-00-R | Peter Fritschel          |                 | 6/2/95   | Phase Noise Interferometer Design Review  |
| G960001-00-M | Gary Sanders             |                 | 2/1/96   | Progress Report on LIGO - Presentation Made at the Pacific Conference on Gravitation and Cosmology in Seoul, Korea in February 1996 |
| G960002-00-M | Gary Sanders             |                 | 1/24/96  | LIGO Research Community: The View From LIGO - Aspen Conference  |
| G960004-00-E |                          |                 | 12/11/95 | Viewgraphs from Science and Integration Meeting of 11-12 December 1995  |
| G960005-00-R | Vladimir Braginsky       |                 | 12/10/95 | Viewgraphs on Test Mass Suspensions and Suspension Noise  |
| G960006-00-O | Otto Matherny            |                 | 1/31/96  | LIGO Presentation for Contractors in Washington on 21 February 1996   |
| G960008-00-M | Gary Sanders             |                 | 2/11/96  | Managing the LIGO Project - France  |
| G960009-00-O | Professor Philip Kreider |                 | 2/16/96  | Lightning Protection for the LIGO Facilities  |
| G960009-00-O | William Parker           |                 | 2/16/96  | Lightning Protection for the LIGO Facilities  |
| G960010-00-M | Fred Raab                |                 | 5/20/96  | LIGO Contractors Briefing   |
| G960016-00-O |                          |                 | 2/2/96   | Southeast Arm Showing an Excavated Area to Identify Extent of Organic Depth, Between Stations 107 & 110                             |
| G960017-01-O |                          |                 | 2/2/96   | Livingston - Southwest Arm, Station 9+50 Installing 72in. Culvert Piping  |
| G960017-02-O | Ralph M. Parsons Company |                 | 2/2/96   | Livingston - Southwest Arm Station 9+50 Showing 72in. Culvert Pipe Ready to Wrap Joints with Geotech Material                       |
| G960017-03-O | Ralph M. Parsons Company |                 | 2/2/96   | Southeast Arm, at Station 106:00 Showing 72" Culvert Pipe   |
| G960017-04-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm at Station 111.00 Showing 36" Culvert Piping on Bedding   |
| G960017-05-O |                          |                 | 2/2/96   | Southwest Arm Looking South at Culvert Crossing 111:00  |
| G960017-06-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Organic Material Removed from Culvert Crossing Station 111:00   |
| G960017-07-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Showing the Mound of Organic Material Removed from Station 111:00 Culvert Crossing                                    |
| G960017-08-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Showing Another View of Organic Material, Station 111:00  |
| G960017-09-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm, A Closeup of the Organic Material at Station 111:00  |
| G960017-10-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm at Station 111:00, A Closeup View of the Organic Material Encountered   |
| G960017-11-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Showing a Closeup View of Organic Material Removed from Culvert Crossing at Station 111:00                            |
| G960017-12-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Standing at Station 111:00 Looking West at Station 123:00   |
| G960017-13-O | Ralph M. Parsons Company |                 | 2/2/96   | Southwest Arm Excavating for the 60" Culvert Pipe at Station 123:00   |
| G960017-14-O | Ralph M. Parsons Company |                 | 2/2/96   | Southeast Arm Station 110:00 Disking of Subbase Material  |
| G960017-15-O | Ralph M. Parsons Company |                 | 2/2/96   | Southeast Arm Between Stations 107:00 and 110:00, Organic Material to be Removed  |
| G960017-17-O | Ralph M. Parsons Company |                 | 2/2/96   | A Closeup View of the Organic Material Between Stations 107 & 110   |
| G960017-18-O | Ralph M. Parsons Company |                 | 2/2/96   | A Closeup View of the Organic Material Between Stations 107 & 110   |
| G960017-19-O |                          |                 | 2/2/96   | Southwest Arm Showing Grader Wind Rowing Area of Organic Material   |
| G960017-20-O |                          |                 | 2/2/96   | Another View of Organic Material to Show Extent at Stations 107 & 110 Southwest Arm   |

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| G960017-21-O |                          |                 | 2/2/96  | This is the Same Area (Stations 107 & 110, Southwest Arm) But a Different View to Help Show the Extent   |
| G960017-22-O |                          |                 | 2/2/96  | Removing Organic Material, Stations 107 & 100, Southwest Arm   |
| G960017-23-O |                          |                 | 2/2/96  | Southeast Arm Showing Mean Depth of Organic Material Approximately 24", Southeast Arm Station 110  |
| G960017-24-O |                          |                 | 2/2/96  | Southwest Arm at Station 9:50 Conducting Moisture Content Test of Soil; Cow Stuck in Mud   |
| G960018-01-O | Ralph M. Parsons Company |                 | 3/2/96  | Tumbleweeds. No Other Captions at This Time.   |
| G960018-08-O | Ralph M. Parsons Company |                 | 3/2/96  | Tumbleweeds. No Other Captions at This Time.   |
| G960020-01-O |                          |                 | 1/29/96 | Main Road As It Passes Construction Site Office; Water Left by Storm   |
| G960020-02-O |                          |                 | 1/29/96 | Looking Southwest At Culvert Crossing 9+50   |
| G960020-03-O |                          |                 | 1/29/96 | Stranco Man and Helper, De-Watering at Construction Site Main Road   |
| G960020-04-O |                          |                 | 1/29/96 | Bridge at creek on the road leading to the construction site, water backing up on the upstream side  |
| G960020-05-O |                          |                 | 1/29/96 | The same as above except on the down stream side of the bridge   |
| G960020-06-O |                          |                 | 1/29/96 | Looking east at access bridge to site, showing where the creek is backing up on the down stream side   |
| G960020-07-O |                          |                 | 1/29/96 | Low area east of access road bridge, where water has backed up   |
| G960020-08-O |                          |                 | 1/29/96 | Later on the same day the same place as G960020-07-0, only looking West; note dark line in foreground indicating high water mark                     |
| G960020-09-O |                          |                 | 2/1/96  | A small tornado came through west of site damaging properties as the tail touched the ground   |
| G960020-10-O |                          |                 | 2/1/96  | Looking West at southwest arm and the culvert crossing at station 9+50; note ice on pond in forefront  |
| G960020-11-O |                          |                 | 2/1/96  | Ice on pond alongside access road at main building site  |
| G960020-12-O |                          |                 | 2/1/96  | Looking East alongside the main access road, pond icing at building site   |
| G960020-13-O |                          |                 | 2/1/96  | Icing at creek crossing road to main site  |
| G960020-14-O |                          |                 | 2/5/96  | Icing at creek on the main road to site  |
| G960020-15-O |                          |                 | 2/5/96  | Icing on creek, above the bridge on the main road to site  |
| G960020-16-O |                          |                 | 2/5/96  | Another shot of G960020-15-O   |
| G960020-17-O |                          |                 | 2/6/96  | Excavating trench, Southeast arm at station 29+00  |
| G960020-18-O |                          |                 | 2/6/96  | View of excavated trench at station 28+00 on the southeast arm   |
| G960020-19-O |                          |                 | 2/6/96  | Access road to the southeast arm taken at main building site   |
| G960020-20-O |                          |                 | 2/6/96  | Installing 72" culvert pipe at station 106+00, southeast arm   |
| G960020-21-O |                          |                 | 2/6/96  | An instrument used to align culvert pipe at station 106+00, southeast arm  |
| G960020-22-O |                          |                 | 2/6/96  | Installing culvert pipe at station 106+00. After, dozer is used to push pipe on to the other while the crane holds pipe in place                     |
| G960021-01-O |                          |                 | 1/25/96 | Southeast arm at Station 56 looking west at Dixie Power Line right-of-way  |
| G960021-02-O |                          |                 | 1/25/96 | Southwest arm at Station 56 looking north from Dixie Power Line right-of-way   |
| G960021-03-O |                          |                 | 1/25/96 | Southeast arm at Station 56 looking southeast (first lift of fill)   |
| G960021-04-O |                          |                 | 1/25/96 | Southeast arm looking northwest from Station 43 at culvert crossing (forefront) and Dixie power pole in the far distance (first lift of berm)        |
| G960021-05-O |                          |                 | 1/25/96 | Southeast arm installing culvert pipe at Station 83  |
| G960021-06-O |                          |                 | 1/25/96 | Southeast arm, culvert crossing at Station 83:00   |
| G960021-07-O |                          |                 | 1/25/96 | Southeast arm culvert pipe installation at Station 83  |
| G960021-08-O |                          |                 | 1/25/96 | Southeast arm at culvert crossing Station 83; rain diversion ditch   |
| G960021-09-O |                          |                 | 1/25/96 | Southeast arm, station 83:00 using crane to off load and set culvert pipe  |
| G960021-10-O |                          |                 | 1/25/96 | Southeast arm, Station 83:00, showing a rejected section of culvert pipe   |
| G960021-11-O |                          |                 | 1/25/96 | Culvert pipe at Station 42:00 looking East   |
| G960021-12-O |                          |                 | 1/25/96 | Southeast arm looking East; trench bank in foreground and first lift of berm fill in the background between Station 41:00 and 43:00                  |
| G960021-13-O |                          |                 | 1/25/96 | Southeast arm looking Northeast at trench in foreground and culvert crossing at Station 27:00 in the background. Further North are the site offices. |
| G960021-14-O |                          |                 | 1/26/96 | Southeast arm looking North at culvert crossing 106:00, installing pipe  |
| G960021-15-O |                          |                 | 1/26/96 | Southeast arm installing culvert pipe at station 106:00  |
| G960021-16-O |                          |                 | 1/26/96 | Southeast arm at Staiton 106:00 installing piep at culvert crossing  |
| G960021-17-O |                          |                 | 1/26/96 | Site entrance road at State Highway 63 looking west toward the project   |
| G960021-18-O |                          |                 | 1/26/96 | Entrance road half-way to site office just before the creek and birdge, 20 MPH signs to control traffic speed  |
| G960021-19-O |                          |                 | 1/26/96 | Power poles running on the west side of central building site to supply temporary power to the construction site                                     |
| G960021-20-O |                          |                 | 1/26/96 | The construction site offices showing power transformer and well, center of photo  |
| G960021-21-O |                          |                 | 1/26/96 | Construction site office complex from left to right: Front, Stranco's office; rear, CM office; PSI office; generator trailer; night watchman trailer |
| G960021-22-O |                          |                 | 1/26/96 | Another view of site construction office   |
| G960021-23-O |                          |                 | 1/26/96 | Southeast arm at Station 106:00 installing culvert pipe  |
| G960021-24-O |                          |                 | 1/26/96 | Road to construction site. Notice storm building in upper right corner of photo.   |
| G960022-01-O | Ralph M. Parsons Company |                 | 2/16/96 | Southwest Arm At Station 92+60 Culvert Crossing  |
| G960022-02-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 92+60 culvert crossing  |
| G960022-03-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 16+40 excavating for culvert crossing   |
| G960022-04-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 16+40 excavating for culvert crossing, checking grade   |
| G960022-05-O | Ralph M. Parsons Company |                 | 2/18/96 | Checking grade at Southwest arm, station 16+40 culvert crossing  |



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| G960022-06-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 16+40, checking grade at culvert crossing   |
| G960022-07-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123 culvert crossing, setting pipe in place   |
| G960022-08-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123 culvert crossing, checking pipe installation  |
| G960022-09-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123 looking Northeast reviewing surface drainage  |
| G960022-10-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 96+60 installing pipe for the first time, correction followed   |
| G960022-11-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 92+60 rigging pipe into place   |
| G960022-12-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm disking berm at station 113+00   |
| G960022-13-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm around station 115; organic material exposed during disking operation  |
| G960022-14-O |                          |                 | 2/18/96 | Southeast arm at station 113+00 disking berm material to remove moisture   |
| G960022-15-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm at station 113+00 removing small tree found by disking   |
| G960022-16-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm at sstation 113+00 showing compacted fill  |
| G960022-17-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeas arm view looking North at a drainage ditch used for construction  |
| G960022-18-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm at station 118 looking Southeast to the end of boundary  |
| G960022-19-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm at station 112 looking Northeast, compacted berm   |
| G960022-20-O | Ralph M. Parsons Company |                 | 2/18/96 | Southeast arm looking Southeast at end of boundary limit, compacted fill   |
| G960022-21-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123+00 culvert crossing, backfill operation   |
| G960022-22-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123 culvert crossing  |
| G960022-23-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123+00 culvert crossing showing pea gravel backfill around pipe   |
| G960022-24-O | Ralph M. Parsons Company |                 | 2/18/96 | Southwest arm at station 123+00 culvert crossing backfill operation  |
| G960024-01-O | Ralph M. Parsons Company |                 | 2/22/96 | Site Visit by Congressman Richard Baker. From Left to Right, Skip Smart, Congressman Baker, Mayor Dale Erdey and Bo Garrison, Former Head of the State Police. |
| G960024-02-O | Ralph M. Parsons Company |                 | 2/22/96 | Congressman Richard Baker and Visiting Group With the Southeast Arm in the Background.   |
| G960024-03-O | Ralph M. Parsons Company |                 | 2/22/96 | Installing 60" Culvert Pipe at Crossing 44+60, Southwest Arm.  |
| G960024-04-O | Ralph M. Parsons Company |                 | 2/17/96 | Southwest Arm, at Station 60+00 Installing 60" Culvert Pipe.   |
| G960024-05-O | Ralph M. Parsons Company |                 | 2/17/96 | Southwest Arm at Station 60+00 Getting Ready to Start Backfilling.   |
| G960024-06-O | Ralph M. Parsons Company |                 | 2/17/96 | Southwest arm at Station 60+00 Starting to Backfill.   |
| G960024-07-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 9+50 Showing Cross Section of Backfill.   |
| G960024-08-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 9+50 A Section of Replacement Pipe.   |
| G960024-09-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 44+60 The Access Road Down the Center of Right of Way.  |
| G960024-10-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 44+60 Showing Culvert Pipe Being Prepared for Backfill.   |
| G960024-11-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 44+60 Showing the Ends of Pipe.   |
| G960024-12-O | Ralph M. Parsons Company |                 | 2/21/96 | Southwest Arm at Station 60+00 Showing Cross Section of Backfill.  |
| G960024-13-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm About Station 113 Looking North, Disking Berm.   |
| G960024-14-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 115+00 Looking South at Disking Berm Material to Remove Moisture.   |
| G960024-15-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 112+00 Dozing Organic Material to the Side.   |
| G960024-16-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 112+00 Showing Organic Material.  |
| G960024-17-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 111+00 a Closer Look at the Organic Material.   |
| G960024-18-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 118 Looking North Showing Contrast of Organic Material.   |
| G960024-19-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm at Station 112 Looking Northeast, Compacted Berm.  |
| G960024-20-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm At Station 115 Showing a Close- Up of Removing Organic Material.   |
| G960024-21-O | Ralph M. Parsons Company |                 | 2/22/96 | Southeast Arm Removing Unacceptable Material, as In Previous Photo.  |
| G960025-01-O | Ralph M. Parsons Company |                 | 2/23/96 | Southwest Arm at Station 89+00 Culvert Crossing, 72" Pipe Just Arrived.  |
| G960025-02-O | Ralph M. Parsons Company |                 | 2/23/96 | Southwest Arm at Station 89+00 Installing Culvert Pipe Bedding.  |
| G960025-03-O | Ralph M. Parsons Company |                 | 2/24/96 | Southwest Arm at Station 123+00 Looking West.  |
| G960025-04-O | Ralph M. Parsons Company |                 | 2/24/96 | Southwest Arm at Station 120+00, Permanent Drainage Ditch.   |
| G960025-05-O | Ralph M. Parsons Company |                 | 2/24/96 | Southwest Arm at Station 120+00 Looking South at Permanent Drainage Ditch.   |
| G960025-06-O | Ralph M. Parsons Company |                 | 2/24/96 | Southeast Arm at Station 113+00 Looking at Construction Equipment Being Repaired and Serviced.   |
| G960025-07-O | Ralph M. Parsons Company |                 | 2/24/96 | Southeast Arm at Station 113+00, Looking Southeast at Berm Construction.   |
| G960025-08-O | Ralph M. Parsons Company |                 | 2/24/96 | Southeast Arm Looking North From Station 114+00 Culvert Crossing 106+00 in the Background.   |
| G960025-09-O | Ralph M. Parsons Company |                 | 2/24/96 | Southeast Arm Looking North at Station 106+00.   |
| G960025-10-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm Progress Co-Existing Together.   |
| G960025-11-O | Ralph M. Parsons Company |                 | 2/27/96 | Southwest Arm at Station 98+00 Repairing Existing Road for Hauling   |
| G960025-12-O | Ralph M. Parsons Company |                 | 2/27/96 | Southwest Arm at Station 89+00 Clearing Away Banked Material to Receive Bedding Material.  |
| G960025-13-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at the Far End Access Road Entering From the South Showing Road Upgrade for Hauling.   |
| G960025-14-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at Station 115+00 Removing Tree Parts.   |
| G960025-15-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at Station 114+00 Spreading out Excavated Fill to Start the Drying Process.  |
| G960025-16-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at Station 113+00 Removing Tree Parts.   |
| G960025-17-O | Ralph M. Parsons Company |                 | 2/27/96 | Southwest Arm at Station 114+00 Showing Stump Picker in Action.  |

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| G960025-18-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at Station 119+00 Windrowing Material to Eliminate Excess Moisture.  |
| G960025-19-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm at Station 121+00 Looking South Showing the Results of Disking the Windrow Material.   |
| G960025-20-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm Between Stations 119+00 and 121+00 Showing Disking Operation.  |
| G960025-21-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm Standing at Station 112+00 Showing Berm Fill Dried and Ready for Compaction Roller.  |
| G960025-22-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm Looking South at End Station 131.23, Drain Trench.   |
| G960025-23-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm About Station 129+00 Looking South at Tree Parts in the Foreground and Excavated Fill in the Background.                                   |
| G960025-24-O | Ralph M. Parsons Company |                 | 2/27/96 | Southeast Arm Looking North About Station 129+00 Fill Drying Operation.  |
| G960027-00-M | Fred Raab                |                 | 6/25/96 | LIGO: Tri-Cities Newest Science Facility.  |
| G960028-01-O |                          |                 | 3/1/96  | Site entrance road just west of cattleguard after rainstorm  |
| G960028-02-O |                          |                 | 3/1/96  | Site access road midway between cattle guard and creek bridge  |
| G960028-03-O |                          |                 | 3/1/96  | Low spot just east of bridge at creek on entrance road   |
| G960028-04-O |                          |                 | 3/1/96  | Water covering a low spot in road just west of bridge at creek on entrance road  |
| G960028-05-O |                          |                 | 3/1/96  | Bridge at creek looking at the down stream side  |
| G960028-06-O |                          |                 | 3/1/96  | View from bridge looking west toward site, water crossing road   |
| G960028-07-O |                          |                 | 3/1/96  | View looking east toward bridge, same as G960028-06-O, different angle   |
| G960028-08-O |                          |                 | 3/1/96  | Building site area at the cross roads, Stranco's backhoe digging a sump to pump  |
| G960028-09-O |                          |                 | 3/4/96  | Southeast arm at station 109+00, showing water drainage from rain  |
| G960028-10-O |                          |                 | 3/4/96  | Southeast arm at station 110+00 looking southeast at soil condition after rain   |
| G960028-11-O |                          |                 | 3/5/96  | Southeast arm at station 112+00 using a dozer to blade off wet material before discing   |
| G960028-12-O |                          |                 | 3/5/96  | Southwest arm at station 89+00 clearing away material to start excavating culvert crossing   |
| G960028-13-O |                          |                 | 3/5/96  | Southeast arm at the far end access road entering fom the south showing road up grade for hauling  |
| G960028-14-O |                          |                 | 3/5/96  | Southwest arm at station 89+00, excavating for culvert crossing  |
| G960028-15-O |                          |                 | 3/5/96  | Southwest arm at station 89+00 surveying locatin for culvert crossing  |
| G960028-16-O |                          |                 | 3/8/96  | Southwest arm facing east, site conditions following rainfall  |
| G960028-17-O |                          |                 | 3/8/96  | Southwest arm at station 111+00 facing east showing site conditions following a rainstorm  |
| G960028-18-O |                          |                 | 3/8/96  | Southwest arm at station 98+00 where access road crosses LIGO site   |
| G960028-19-O |                          |                 | 3/8/96  | Intersection of access roads at building site; ABMB survey crew at work.   |
| G960028-20-O |                          |                 | 3/8/96  | At building site, off loading an additional roller compactor   |
| G960028-21-O |                          |                 | 3/8/96  | Southeast arm at station 113+00 looking north at construction drain ditch  |
| G960028-22-O |                          |                 | 3/8/96  | Southeast arm at station 113+00 looking south at construction drainage ditch   |
| G960028-23-O |                          |                 | 3/8/96  | Southeast arm at station 113+00 where old road crossed the site property. Cow foot tracts on berm from old migration route assists in compaction effort. |
| G960028-24-O |                          |                 | 3/8/96  | Southeast arm at station 113+00 looking south at the end of the property showing the effects of rain on berm fill  |
| G960030-01-O | Ralph M. Parsons Company |                 | 3/13/96 | Segregating the Existing Tumbleweeds in Preparation for Burning.   |
| G960030-02-O | Ralph M. Parsons Company |                 | 3/14/96 | Burning Tumbleweeds Northwest Arm.   |
| G960030-03-O | Ralph M. Parsons Company |                 | 3/14/96 | Burning Tumbleweeds Northwest Arm.   |
| G960030-04-O | Ralph M. Parsons Company |                 | 3/12/96 | Typical Repaired Pipe Joint Using a Dresser Coupling at One End and an O-Ring Hub Joint on the Other End.  |
| G960030-05-O | Ralph M. Parsons Company |                 | 3/14/96 | Typical Air Vent, Installed at all High Points to Prevent Damage to the System at Start Up of the Pump.  |
| G960030-06-O | Ralph M. Parsons Company |                 | 3/12/96 | Men at Work, Repair of the Waterline to the Pond.  |
| G960030-07-O | Ralph M. Parsons Company |                 | 3/14/96 | Concrete Pour Continues While Under Stringent Monitoring.  |
| G960030-08-O | Ralph M. Parsons Company |                 | 3/14/96 | Concrete Pour Continued for the Walls at the Corner Station.   |
| G960030-09-O | Ralph M. Parsons Company |                 | 3/14/96 | Complete Poured Foundation Wall.   |
| G960030-10-O | Ralph M. Parsons Company |                 | 3/14/96 | Placing Concrete for the Temporary Transformer Slab.   |
| G960030-11-O | Ralph M. Parsons Company |                 | 3/14/96 | PUD Supplied Electrical Bake-Out Vaults.   |
| G960030-12-O | Ralph M. Parsons Company |                 | 3/15/96 | Typical PUD Installed Electrical Bake-Out Vault.   |
| G960030-13-O | Ralph M. Parsons Company |                 | 3/14/96 | No Caption Available   |
| G960030-14-O | Ralph M. Parsons Company |                 | 3/14/96 | No Caption Available   |
| G960030-15-O | Ralph M. Parsons Company |                 | 3/14/96 | No Caption Available   |
| G960030-16-O | Ralph M. Parsons Company |                 | 3/14/96 | No Caption Available   |
| G960030-17-O | Ralph M. Parsons Company |                 | 3/14/96 | Northwest Arm Looking West, Road Closed for Tumbleweed Burning.  |
| G960030-18-O | Ralph M. Parsons Company |                 | 3/14/96 | Equipment Ready for Tumbleweed Burning, Fire Department on Standby.  |
| G960030-19-O | Ralph M. Parsons Company |                 | 3/14/96 | First Lighting of the Tumbleweed, Northwest Arm.   |
| G960030-20-O | Ralph M. Parsons Company |                 | 3/12/96 | Typical Vacuum Equipment Interface Slab Walls Forming and Re-Bar Installation.   |
| G960030-21-O | Ralph M. Parsons Company |                 | 3/11/96 | Typical Vacuum Equipment Interface Slab Wall Forming and Re-Bar Completed.   |
| G960030-22-O | Ralph M. Parsons Company |                 | 3/12/96 | Typical Vacuum Equipment Interface Slab Wall, Forming and Re-Bar Completed. Inspected and Ready to Pour Concrete.  |
| G960030-23-O | Ralph M. Parsons Company |                 | 3/15/96 | Day of the First Concrete Pour for the Vacuum Equipment Interface Slab at the Northwest Arm Mid-Station.   |
| G960030-24-O | Ralph M. Parsons Company |                 | 3/14/96 | Successful Start of Concrete Placing.  |
| G960030-25-O | Ralph M. Parsons Company |                 | 3/14/96 | Rigorous Inspection and Witness Team.  |

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| G960030-26-O | Ralph M. Parsons Company      |                 | 3/14/96 | Quality Assurance Inspector at Site.   |
| G960030-27-O | Ralph M. Parsons Company      |                 | 3/14/96 | Slump Test, Specification 3" , Actual 3 1/4"   |
| G960030-28-O | Ralph M. Parsons Company      |                 | 3/14/96 | Air Entrainment Test. Specification 5-7% Actual 7%   |
| G960031-01-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southwest arm at station 92+60 culvert crossing installing the concrete plugs in top of pipe   |
| G960031-02-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southwest arm at station 92+60 culvert crossing showing the concrete pipe lifting holes, plugged in foreground and the back hoe clearing out an area of peagravel installation         |
| G960031-03-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southwest arm at station 92+60 in the foreground and the pipeline crossing and then further out,culvert crossing 89+00 in the background   |
| G960031-04-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southwest arm at station 92+60 getting ready to backfill culvert pipe with peagravel in the background. The equipment operators finally got into a photo.                              |
| G960031-05-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm station 132+00 excavating and spreading berm material  |
| G960031-06-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 130+00 disking berm material to remove moisture for compaction  |
| G960031-07-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 115+00 looking north at the results of disking berm material  |
| G960031-08-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 120+00 looking Southeast, working the material to remove moisture.  |
| G960031-09-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 120+00 looking Southeast at excavating trench for berm material.  |
| G960031-10-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 120+00 looking North at partially excavated trench.   |
| G960031-13-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 130+00 showing berm material pile that has been excavated from the trench.  |
| G960031-14-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 132+00, spreading out berm material to start the drying process.  |
| G960031-15-O |                               |                 | 3/12/96 | Southeast arm at station 132+00 looking north at base prior to starting the disking operation.   |
| G960031-16-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 132+00 looking Northwest before starting disking in foreground and the disking operation ongoing in the background.   |
| G960031-17-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm looking north at station 120+00 looking at berm construction.  |
| G960031-18-O |                               |                 | 3/12/96 | Southeast arm at station 128+00 looking at the drying of berm material.  |
| G960031-19-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm showing a temporary drain ditch to assist in the removal of rain water from the berm area  |
| G960031-20-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 1126+00 showing construction drain ditch used for the removal of rain water.  |
| G960031-21-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 124+00 looking at a closeup of the disking operation  |
| G960031-22-O |                               |                 | 3/12/96 | Southeast arm at station 123+00 looking north at material drying out from disking operation.   |
| G960031-23-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 128+00 disking operation.   |
| G960031-24-O | Ralph M. Parsons Company      |                 | 3/12/96 | Southeast arm at station 128+00 looking at disking operation.  |
| G960032-01-O | Ralph M. Parsons Company      |                 | 3/15/96 | Southwest Arm, Station 24+70 Installing 72" Diameter Culvert Pipe  |
| G960032-02-O | Ralph M. Parsons Company      |                 | 3/15/96 | Southwest Arm Station 24+70. Installing 72" Culvert Pipe, Ready to Wrap Joints With Geotech Material.  |
| G960032-03-O | Ralph M. Parsons Company      |                 | 3/15/96 | Southwest Arm, At Station 24+70 Showing 72" Culvert Pipe Being Moved Into Place.   |
| G960032-04-O | Ralph M. Parsons Company      |                 | 3/15/96 | Southwest Arm at Station 24=70 Showing 72" Culvert Piping Being Installed.   |
| G960032-05-O |                               |                 | 3/13/96 | Southeast Arm Looking at Station 132+00, Rolling for Compaction.   |
| G960032-06-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm Showing Moist Material in the Foreground, Two Compaction Rollers Working to Get the Required Compaction and a Disking Operation in the Background.                       |
| G960032-07-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 120+00. A Dozer Moving Moist Material in Place to Start the Drying Process.   |
| G960032-08-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm Showing an Excavator Stockpiling Organic Material Off of Berm to Make Room for Acceptable Material.  |
| G960032-09-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 110+00 Showing the Excavator (Caption 8) Removing Organic Material and the Dozer Bringing Acceptable Material Excavated From Trench at Right.                 |
| G960032-10-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm Looking SE at the End of the Arm Showing Trench Excavation.  |
| G960032-11-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 120+00 Looking NW at Excavated Trench, The Walls Are Left So Dryer Material May be Obtained, the Excavation is a Little Deeper to Allow for Walls to Crumple. |
| G960032-12-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 119+00 Showing a Dozer Moving Material From Excavated Trench to Berm Area.  |
| G960032-13-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 128+00 Showing Berm Material Spread and Disked for Drying.  |
| G960032-14-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm Station 120+00 Foreground Disked Material Drying and a Grader Rolling Material Over to Expedite the Drying Process.  |
| G960032-15-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 112+00 a Dozer Spreading Material From the Stockpile of Material Excavated From Trench to Berm  |
| G960032-16-O | Ralph M. Parsons Company      |                 | 3/13/96 | Southeast Arm at Station 110+00 Showing a Lift of Berm Fill.   |
| G960032-17-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southeast Arm at Station 113+00 Showing the Elevation of the Berm at the Date Shown.   |
| G960032-18-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southeast Arm at Station 115+00 Showing Excavation of Trench and Spreading Material on Berm Area.  |
| G960032-19-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southeast Arm at Station 115+00 Showing the Removal of Tree Parts From the Berm Fill.  |
| G960032-20-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southeast Arm at Station 114+00 Grader Removing a Thin Layer of Material After a Light Rain to Start a New Lift of Berm.   |
| G960032-21-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southeast Arm at Station 112+00 Showing a Stump Picker at Work.  |
| G960032-22-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southwest Arm at Station 24+70 Showing the Culvert Pipe Ready for Backfill.  |
| G960032-23-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southwest Arm at Station 24+70 culvert Crossing Looking NE at Culvert Pipe Being Off Loaded at Culvert Crossing Station 16+40  |
| G960032-24-O | Ralph M. Parsons Company      |                 | 3/14/96 | Southwest Arm Showing Showing the Culvert Pipe Bedding at Station 24+70.   |
| G960050-00-B | Gerry Stapfer                 |                 | 3/26/96 | Optical Baffle Procurement   |
| G960051-00-E | Dennis Coyne                  |                 | 2/4/96  | LIGO - Presentation at IEEE 1996 Aerospace Applications Conference   |
| G960052-00-M | Barry Barish                  |                 | 2/8/96  | The Detection of Gravitational Waves - Presented at U.C. Riverside, 8 February 1996  |
| G960053-00-M | Barry Barish                  |                 | 3/5/96  | The Detection of Gravitational Waves - Presented at Harvey Mudd College, 5 March 1996  |
| G960054-00-M | Barry Barish                  |                 | 1/26/96 | Gravitational Waves - The Status of LIGO   |
| G960055-00-M | California Institute of Tech. |                 | 4/9/96  | NSF Management Review Presentations, 9-11 April 1996   |
| G960056-00-E | Albert Lazzarini              |                 | 4/9/96  | Systems Engineering and Integration - NSF Review Presentation for 9 April 1996   |
| G960058-00-M | Barry Barish                  |                 | 3/30/96 | Baryon Instability Workshop - Summary Talk   |

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| G960059-00-M | Barry Barish                  |                 | 3/20/96 | The LIGO Project - MIT NSF Review, 20 March 1996   |
| G960060-00-D | David Shoemaker               |                 | 4/9/96  | Detector Technical Update - NSF Review Presentation  |
| G960061-00-D | Stan Whitcomb                 |                 | 4/9/96  | Detector and R&D - NSF Review Presentation for 9 April 1996  |
| G960062-00-P | Phil Lindquist                |                 | 4/9/96  | Project Control Systems - NSF Review Presentation for 9 April 1996   |
| G960063-00-F | Mark Coles                    |                 | 4/9/96  | Facilities Management During Construction, Fabrication, Installation - NSF Review Presentation for 9 April 1996  |
| G960065-00-F | Gerry Stapfer                 |                 | 4/5/96  | NSF Review Presentation, Facilities - 9 April 1996   |
| G960066-00-M | California Institute of Tech. |                 | 3/20/96 | Catching the Gravitational Wave - LIGO Project Information Brochure  |
| G960069-00-O |                               |                 | 3/19/96 | International Conference on Gravitational Waves: Sources and Detectors in Pisa, Italy - 19-23, March 1996  |
| G960075-01-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); Gabriela Gonzalez adjusting a suspended mirror   |
| G960075-02-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view of optics of michelson interferometer   |
| G960075-03-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view of optics of Michelson interferometer   |
| G960075-04-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view down vacuum tube towards the recycling mirror   |
| G960075-05-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view of the suspended recycling mirror   |
| G960075-06-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); niew of back of recycling mirror   |
| G960075-07-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view of back of recycling mirror   |
| G960075-08-I |                               |                 | 2/20/96 | Close-up of suspended recycling mirror, showing safety stops and suspension actuators  |
| G960075-09-I |                               |                 | 2/20/96 | View of isolation stack, close-up of SS, Viton, top plate  |
| G960075-10-I |                               |                 | 2/20/96 | Junk; digital oscilloscope   |
| G960075-11-I |                               |                 | 2/20/96 | View of isolation stack, top table, and PNI optics   |
| G960075-12-I |                               |                 | 2/20/96 | View of recycling vacuum tube from the exterior  |
| G960075-13-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view down vacuum tube towards the recycling mirror   |
| G960075-14-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); view down the vacuum tube towards the recycling mirror   |
| G960075-15-I |                               |                 | 2/20/96 | View of Phase Noise Interferometer (PNI) central tank seismic isolation system   |
| G960075-16-I |                               |                 | 2/20/96 | Collection of vacuum-cleaned hardware in clean bench, Phase Noise Interferometer (PNI)   |
| G960075-17-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); input optics for argon laser light source  |
| G960075-18-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); electronics for non-recycled Michelson phase of research   |
| G960075-19-I |                               |                 | 2/20/96 | Phase Noise Interferometer (PNI); obsolete ion pump  |
| G960075-20-I |                               |                 | 2/20/96 | Bridgeport milling machine, circa 1950, in MIT lab machine shop  |
| G960077-00-M | Gary Sanders                  |                 | 4/15/96 | 40 Meter Interferometer Schedule Planning and Tracking   |
| G960078-00-E | Kent Blackburn                |                 | 2/26/96 | LIGO - Progress and Prospects - Presentation at International Stefan Banach Center, Institute of Mathematics, Polish Academy of Science, Warsaw, Poland  |
| G960081-00-M | Kent Blackburn                |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960081-00-M | Fred Raab                     |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960081-00-M | Aaron Gillespie               |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960081-00-M | A. Kuhnert                    |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960081-00-M | James Mason                   |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960081-00-M | Torrey Lyons                  |                 | 1/15/96 | Time-Domain Behavior of the 40-Meter Interferometer  |
| G960083-00-E |                               |                 | 4/17/96 | LIGO - VIRGO: Meeting on Data Formats and Data Distribution, 17-18 April 1996, Pasadena  |
| G960084-00-M | Jordan Camp                   |                 | 4/30/96 | Length Sensing & Control Subsystem Design Requirements Review, 30 April 1996   |
| G960084-00-M | Mike Zucker                   |                 | 4/30/96 | Length Sensing & Control Subsystem Design Requirements Review, 30 April 1996   |
| G960084-00-M | Lisa Sievers                  |                 | 4/30/96 | Length Sensing & Control Subsystem Design Requirements Review, 30 April 1996   |
| G960085-00-M | Barry Barish                  |                 | 4/9/96  | LIGO: Status and Review, NSF Review of 9-11 April 1996   |
| G960085-01-O | Ralph M. Parsons Company      |                 | 4/4/96  | Another View of the Beam Tube Enclosure Alignment Groove.  |
| G960085-03-O | Ralph M. Parsons Company      |                 | 4/4/96  | Set up of the Gravel Wash and Segregation Plant Near the LIGO Site.  |
| G960086-03-O | Ralph M. Parsons Company      |                 | 4/9/96  | Northwest Arm Near the Mid Station Poor Cohesionless Soil (Black Sand) Conditioned Were Found.   |
| G960086-05-O | Ralph M. Parsons Company      |                 | 4/9/96  | Northwest Arm Near the End Station Wet (27% Moisture) Soil Was Encountered.  |
| G960086-10-O | Ralph M. Parsons Company      |                 | 4/9/96  | At the Acme Yard in Richland, the Contractor Started Preparing the Area for the Beam Tube Enclosures Precast Operation. Rebar Bending Template for all Types of Enclosures.                      |
| G960086-11-O | Ralph M. Parsons Company      |                 | 5/23/96 | Small Hole in the Steam Distribution Pipe Will Provide Steam Curing for the Initial in Form Curing of the Beam Tube.   |
| G960086-15-O | Ralph M. Parsons Company      |                 | 4/9/96  | The Steam Generating Plant Installed to Support the Curing Operation.  |
| G960086-18-O | Ralph M. Parsons Company      |                 | 4/9/96  | Steam Distibution Pipe for the Initial Curing Activities.  |
| G960086-20-O | Ralph M. Parsons Company      |                 | 4/9/96  | Acme Fabricated From Plate the Special Tool That Provided the Beam Tube Enclosure Alignment Groove.  |
| G960087-02-O | Ralph M. Parsons Company      |                 | 4/10/96 | Different View of the Forms as They Arrived at the Acme Yard.  |
| G960087-06-O | Ralph M. Parsons Company      |                 | 4/10/96 | The First Forms Arrived by Truck From Canada.  |
| G960087-07-O | Ralph M. Parsons Company      |                 | 4/10/96 | Finishing Touches for the Vacuum Equipment Interface Slabs. Man Working on the Beam Tube Enclosure Alignment Groove.   |
| G960087-10-O | Ralph M. Parsons Company      |                 | 4/16/96 | Fabricating The First Rebar Mat for the Beam Tube Enclosures.  |
| G960087-12-O | Ralph M. Parsons Company      |                 | 4/18/96 | Concrete is Placed by Utilizing a Concrete Bucket to Place the Concrete Into the Form. The Vibrators are Attached to the Outside of the Formwork.  |
| G960087-13-O | Ralph M. Parsons Company      |                 | 4/10/96 | Rebar Bending Operation Utilizing the Fabricated Template.   |
| G960088-06-O | Ralph M. Parsons Company      |                 | 4/12/96 | Another View of the Geotextile Fabric Installation. The Capillary Barrier Could not be Placed by Belly Dumps, Rather it was Placed on the Side of the Excavation and Pushed in Place by Graders. |

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| G960088-07-O | Ralph M. Parsons Company |                 | 4/12/96 | Geotextile Fabric Was Purchased and Placed in the Areas Where the Black Sand and Wet Soil Were Encountered.  |
| G960088-08-O | Ralph M. Parsons Company |                 | 4/12/96 | Completed Vacuum Equipment Interface Slab at the Corner Station  |
| G960089-01-O | Ralph M. Parsons Company |                 | 4/16/96 | Completed Covering the Geotextile Fabric With the Layer of the Capillary Barrier.  |
| G960089-02-O | Ralph M. Parsons Company |                 | 4/16/96 | Completed Vacuum Equipment Interface Slabs at the Mid Station.   |
| G960089-03-O | Ralph M. Parsons Company |                 | 4/16/96 | Material Production Will Continue until Adequate Quantities Have Been Produced for Paving of the Beam Tube Slab.   |
| G960090-01-O | Ralph M. Parsons Company |                 | 4/17/96 | Another View of the Aggregate Material Production for the Beam Tube Concrete Slab. In the Foreground are the Batch Plant Footings. The Water is From Rock Washing. In Future, Large Sprayers will Disperse the Excess Water in the Des |
| G960090-02-O | Ralph M. Parsons Company |                 | 4/17/96 | View of the Completed Segments in the Storage Area at Acme's Yard. These Units Will be Utilized for the Mock-up Presentation.  |
| G960090-03-O | Ralph M. Parsons Company |                 | 4/11/96 | After the Concrete Has Been Placed the Foundation is Sprayed With White Pigmented Curing Compound.   |
| G960090-04-O | Ralph M. Parsons Company |                 | 4/17/96 | Precast Yard Segment Lifting Assembly.   |
| G960090-05-O | Ralph M. Parsons Company |                 | 4/17/96 | Another Close-up View of the Lifting Assembly.   |
| G960090-06-O | Ralph M. Parsons Company |                 | 4/17/96 | Close-up of the Lifting Assembly and Attachment to the Segment in Preparation for Lifting.   |
| G960090-07-O | Ralph M. Parsons Company |                 | 4/17/96 | First Complete Precast Type "C" Beam Tube Enclosure Continually.   |
| G960090-08-O | Ralph M. Parsons Company |                 | 4/17/96 | First Completed Precast Type "A" Beam Tube Enclosure Service Entrance.   |
| G960090-09-O | Ralph M. Parsons Company |                 | 4/17/96 | PUD Electrical Vault Near the END Station (Note the Difference in Elevation)   |
| G960090-10-O | Ralph M. Parsons Company |                 | 4/17/96 | PUD Installing the Temporary Transformer for Power to the Trailers   |
| G960090-11-O | Ralph M. Parsons Company |                 | 4/17/96 | Steam Generation For the Initial Curing of the Beam Tube Enclosures Before Stripping the Forms   |
| G960090-12-O | Ralph M. Parsons Company |                 | 4/17/96 | Another View of the Steam System That is Used for Initial Curing of The Segments While in the Form.  |
| G960090-19-O | Ralph M. Parsons Company |                 | 4/9/96  | Close-up View of the Soil (Black Sand)   |
| G960091-01-O | Ralph M. Parsons Company |                 | 4/18/96 | No Caption Available   |
| G960091-03-O | Ralph M. Parsons Company |                 | 4/18/96 | View of the Completed Segments in the Storage Area at Acme's Yard. These Units Will be Utilized for the Mock-Up Presentation.  |
| G960091-04-O | Ralph M. Parsons Company |                 | 4/18/96 | No Caption Available   |
| G960091-05-O | Ralph M. Parsons Company |                 | 4/18/96 | Set up of the Formwork for Placing Concrete  |
| G960091-06-O | Ralph M. Parsons Company |                 | 4/18/96 | Another View of the Forms. Service Entrance and Type "C"   |
| G960091-07-O | Ralph M. Parsons Company |                 | 4/10/96 | Concrete is Placed By Utilizing a Concrete Bucket to Place the Concrete Into the Form. The Vibrators Are Attached to the Outside of the Formwork.  |
| G960091-08-O | Ralph M. Parsons Company |                 | 4/18/96 | Traveling Bucket With the Concrete. The Bucket Holds Approximately 1/2 Yard of Concrete and a Typical Type "C" Form Will Require Approximately 5 Cubic Yards of Concrete.  |
| G960092-00-O | Ralph M. Parsons Company |                 | 3/22/96 | Date: 3/22/96 Typical Excavation Along the Both Arms for the Installation of The Capillary Barrier.  |
| G960092-01-O | Ralph M. Parsons Company |                 | 3/24/96 | Typical Placement of the First Layer of the Capillary Rock Along Both Arms   |
| G960092-03-O | Ralph M. Parsons Company |                 | 3/28/96 | Typical Placement of the Second Layer of the Capillary Rock Along Both Arms  |
| G960092-04-O | Ralph M. Parsons Company |                 | 3/26/96 | First of the Rock Washing Equipment Arrived at Site.   |
| G960092-05-O | Ralph M. Parsons Company |                 | 3/25/96 | Temporary Water Line to the Batch Plant, the Road and BTE Crossing Has Been Completed  |
| G960092-06-O | Ralph M. Parsons Company |                 | 3/25/96 | Temporary Field Offices Arrive and Were Set Into Position.   |
| G960092-07-O | Ralph M. Parsons Company |                 | 4/4/96  | Placing Concrete for the Vacuum Equipment Interface Slab at the Northwest Arm Corner Station.  |
| G960092-08-O | Ralph M. Parsons Company |                 | 4/4/96  | Continuing to Place, Until Done, Concrete for the Vacuum Equipment Interface Slab at the Northwest Arm Corner Station.   |
| G960092-09-O | Ralph M. Parsons Company |                 | 4/4/96  | Continuing to Place, Until Done, Concrete. Quality Assurance Activity in the Foreground.   |
| G960092-10-O | Ralph M. Parsons Company |                 | 3/26/96 | Scraper Excavating Along the Beam Tube for Placement of the Capillary Barrier on the Southwest Arm.  |
| G960092-11-O | Ralph M. Parsons Company |                 | 3/26/96 | Scraper Continues the Excavation Along the Southwest Arm   |
| G960092-12-O | Ralph M. Parsons Company |                 | 3/21/96 | Excavation From the Corner Station to the Mid Station Along the Southwest Arm Has Been Virtually Completed.  |
| G960092-13-O | Ralph M. Parsons Company |                 | 3/25/96 | Power and Steam Generator for Curing the Precast Beam Tube Enclosure Segments After Concrete Placement   |
| G960092-14-O | Ralph M. Parsons Company |                 | 3/25/96 | Steam Line and Temporary Bolt Down of the Forms  |
| G960092-15-O | Ralph M. Parsons Company |                 | 3/25/96 | After Stripping of the Beam Tube Enclosures the Units Will be Moved to These Pads for Storage.   |
| G960092-16-O | Ralph M. Parsons Company |                 | 3/25/96 | Clearing the Temporary Area for the Rock Washing Equipment and Concrete Batch Plant.   |
| G960092-17-O | Ralph M. Parsons Company |                 | 3/29/96 | Clearing Area in Preparation for the Concrete Batch Plant.   |
| G960092-18-O | Ralph M. Parsons Company |                 | 3/29/96 | Clearing Area in Preparation for the Concrete Batch Plant  |
| G960092-19-O | Ralph M. Parsons Company |                 | 3/25/96 | Hanford Gravel Pit Number 6 Where Acme is Set Up for Mining and Crushing Gravel for the LIGO Site.   |
| G960092-20-O | Ralph M. Parsons Company |                 | 3/25/96 | Different View of Hanford Gravel Pit Number 6.   |
| G960092-21-O | Ralph M. Parsons Company |                 | 3/27/96 | Typical Sequence of Work for the Vacuum Equipment Interface Slab Walls, Forming.   |
| G960092-22-O | Ralph M. Parsons Company |                 | 3/27/96 | Typical Sequence of Work for the Vacuum Equipment Interface Slab Walls, Concrete.  |
| G960092-23-O | Ralph M. Parsons Company |                 | 3/27/96 | Typical Sequence of Work for the Vacuum Equipment Interface Slab Walls, Stripping Forms, Filling the Snap Tie Voids and Backfilling.   |
| G960092-24-O | Ralph M. Parsons Company |                 | 3/29/96 | Installing Forms and Rebar, and Ground Wire for the Vacuum Equipment Interface Slab.   |
| G960092-25-O | Ralph M. Parsons Company |                 | 3/29/96 | Installing Forms and Rebar, and Ground Wire for the Vacuum Equipment Interface Slab. Cad-Weld Ground Wire to the Rebar.  |
| G960092-26-O | Ralph M. Parsons Company |                 | 3/29/96 | Installing Forms and Rebar, and Ground Wire for the Vacuum Equipment Interface Slab, Final Check and Inspection.   |
| G960095-01-O | Ralph M. Parsons Company |                 | 3/15/96 | Southeast Arm at Station 110+00 Looking North at Survey Crew Taking Berm Fill Quantities.  |
| G960095-02-O | Ralph M. Parsons Company |                 | 3/15/96 | Southeast Arm Surveyor Working on Quantity Checks, Loose Fill Factors are Considered and Agreed to in Each Measurement.  |
| G960095-03-O | Ralph M. Parsons Company |                 | 3/15/96 | Southeast Arm at Station 115+00 Disking Berm Material to Remove Moisture.  |
| G960095-04-O | Ralph M. Parsons Company |                 | 3/15/96 | Southeast arm at Station 115+00 Shaping the Berm Slopes.   |
| G960095-05-O | Ralph M. Parsons Company |                 | 3/18/96 | Access Road Entering Site East of Bridge, Barley Visible in the Background, Taken the Morning After the Storm the Night Before, 18" deep +/-.  |
| G960095-06-O | Ralph M. Parsons Company |                 | 3/18/96 | This Was Taken on the Access Road, East of Bridge at the Intersection of the Service Road Looking North.   |

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| G960095-07-O | Ralph M. Parsons Company |                 | 3/18/96 | The Same Location as in G960095-06-O Except Looking at Bridge in the Background.   |
| G960095-08-O | Ralph M. Parsons Company |                 | 3/18/96 | This Shot is on the Access Road Looking at the Intersection as Described in Photographs G960095-06/07-O  |
| G960095-09-O | Ralph M. Parsons Company |                 | 3/18/96 | This is On the Access Road Into Site Showing a Small Creek Backing Up Over Road. The Tall Trees in the Background is Where the Cattleguard Is. |
| G960095-10-O | Ralph M. Parsons Company |                 | 3/18/96 | A Closer View of the Photo G960095-10-O, Showing the Small Creek Back Up.  |
| G960095-11-O | Ralph M. Parsons Company |                 | 3/18/96 | The Main Access Road to the Site, Showing Small Drainage Ditch Overflowing the Road, the Cattleguard at the Tall Trees.                        |
| G960095-12-O | Ralph M. Parsons Company |                 | 3/18/96 | A Close up View Showing Flooding of the Road West of the Cattleguard.  |
| G960095-13-O | Ralph M. Parsons Company |                 | 3/18/96 | This is the South Entrance Road to the End of the Southeast Arm, Showing Flooding of Road.   |
| G960095-14-O | Ralph M. Parsons Company |                 | 3/18/96 | Southeast Arm Looking at the Disking Operation to Dry Out the Soil About Station.  |
| G960095-15-O | Ralph M. Parsons Company |                 | 3/19/96 | Southeast Arm at Station 115+00 Looking at the End of the Arm, Drying Out Berm Material.   |
| G960095-16-O | Ralph M. Parsons Company |                 | 3/20/96 | Southeast Arm at Station 115+00 Looking Northwest at Culvert Crossing 106+00 Showing Drying of Material.                                       |
| G960095-17-O | Ralph M. Parsons Company |                 | 3/20/96 | Southwest Arm Showing Culvert Pipe at Crossing 24+60 Back Filling Operation.   |
| G960095-18-O | Ralph M. Parsons Company |                 | 3/20/96 | Southwest Arm Looking Northeast At Culvert Crossing 24+60  |
| G960095-19-O | Ralph M. Parsons Company |                 | 3/21/96 | Southeast at Station 111+00 Showing Removing of Organic Soil to be Replaced by Excavated Material.   |
| G960095-20-O | Ralph M. Parsons Company |                 | 3/21/96 | Southeast Arm at Station 110+00 Showing Two Excavators Removing Fill From Trench and a Dozer Spreading Fill Into Place.                        |
| G960095-21-O | Ralph M. Parsons Company |                 | 3/21/96 | Southeast Arm at Station 112+00 Showing Grader Wing Rowing Soil to Expedite the Drying Process.  |
| G960095-22-O | Ralph M. Parsons Company |                 | 3/21/96 | Southeast Arm Showing Disking Operation at Station 130+00  |
| G960095-23-O | Ralph M. Parsons Company |                 | 3/22/96 | Southeast Arm at Station 117+00 Showing a Road Grader Wind Rowing the Lastest Lift to Help the Drying Process.                                 |
| G960095-24-O | Ralph M. Parsons Company |                 | 3/22/96 | Southeast Arm at Station 129+00 Looking Northwest at the Trench on the right and the Berm on the Left.   |
| G960097-01-O | Ralph M. Parsons Company |                 | 4/9/96  | Southeast Arm at Station 110+00 Looking North. Processing Material for Drying.   |
| G960097-02-O | Ralph M. Parsons Company |                 | 4/9/96  | Same as Previous Picture.  |
| G960097-03-O | Ralph M. Parsons Company |                 | 4/9/96  | Southeast Arm at Station 110+00 Looking Southeast Shaping Up the Berm  |
| G960097-04-O | Ralph M. Parsons Company |                 | 4/9/96  | Southeast Arm at Station 111+00 Looking Southeast. Cleanup of Slopes of Berm   |
| G960097-05-O | Ralph M. Parsons Company |                 | 4/9/96  | Southwest Arm at Station 31+00. Excavating for First Lift of Berm.   |
| G960097-06-O | Ralph M. Parsons Company |                 | 4/9/96  | Southwest Arm at Station 31+00 Looking Northeast. Placing the First Lift on Berm   |
| G960097-07-O | Ralph M. Parsons Company |                 | 4/9/96  | Southeast Arm at Station 99+00 Looking Northwest. Processing Subbase Material.   |
| G960097-08-O | Ralph M. Parsons Company |                 | 4/9/96  | Southwest Arm at Station 99+00 Looking Southeast. Processing First Lift From 106+00 To 110+00  |
| G960097-09-O | Ralph M. Parsons Company |                 | 4/9/96  | Southeast Arm at Station 110+00 Looking Northwest. Excavating and Stockpiling Material for Berm  |
| G960097-10-O | Ralph M. Parsons Company |                 | 4/10/96 | Southeast Arm at Station 106+00 Looking Northwest. Processing First Lift.  |
| G960097-11-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 118+00 Looking Southeast. Lift Previously Placed on Berm.   |
| G960097-12-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 118+00 Looking Northwest. Fill Previously Placed on Berm  |
| G960097-13-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 97+00 Looking Southeast. Processing Subbase.  |
| G960097-14-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 100+00. Turning Stockpiles to Allow Drying.   |
| G960097-15-O | Ralph M. Parsons Company |                 | 4/11/96 | Southwest Arm at Station 44+00. Excavation for First Lift on Berm  |
| G960097-16-O | Ralph M. Parsons Company |                 | 4/11/96 | Southwest Arm at Station 44+00. Excavating for First Lift on Berm.   |
| G960097-17-O | Ralph M. Parsons Company |                 | 4/11/96 | Southwest Arm Placing Fill on Berm.  |
| G960097-18-O | Ralph M. Parsons Company |                 | 4/11/96 | Southwest Arm Placing Fill on Berm.  |
| G960097-19-O | Ralph M. Parsons Company |                 | 4/11/96 | Southwest Arm at Station 39+00 Looking Northeast. First Lift on Berm. Prepared for Testing.  |
| G960097-20-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 95+00. Placing First Lift on Berm   |
| G960097-21-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 95+00. Placing First Lift on Berm   |
| G960097-22-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm Cleaning Up and Spreading Wet Material for Drying  |
| G960097-23-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 106+50 Looking Southeast. Processing First Lift at Station 109+00.  |
| G960097-24-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 106+50 Looking Northwest. Placing First Lift on Berm From 95+00 to 100+00.  |
| G960098-01-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm at Station 105+00, Looking North, Disking Material to Remove Moisture.   |
| G960098-02-O | Ralph M. Parsons Company |                 | 4/12/96 | Southeast Arm at Station 110+00, Looking at Berm (left) and Trench Filled With Water and Small Fish.   |
| G960098-03-O | Ralph M. Parsons Company |                 | 4/12/96 | Southwest Arm at Station 69+00 Showing Base Prep in Foreground and Starting the First Lift in the Background.                                  |
| G960098-04-O | Ralph M. Parsons Company |                 | 4/12/96 | Same as Photo #3, Except Closer View.  |
| G960098-05-O | Ralph M. Parsons Company |                 | 4/12/96 | Southwest Arm at Station 64+00 Showing the First Lift of Excavated Material.   |
| G960098-06-O | Ralph M. Parsons Company |                 | 4/12/96 | Southwest Arm at Station 64+00 Showing the Ditch Excavation.   |
| G960098-07-O | Ralph M. Parsons Company |                 | 4/12/96 | Southwest Arm at Station 57+00 Showing Trench Excavation.  |
| G960098-08-O | Ralph M. Parsons Company |                 | 4/12/96 | Southwest Arm at Station 70+00 Looking at Trench Excavation and Berm.  |
| G960098-09-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 24+00 Excavating Material for Berm From Trench.   |
| G960098-10-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 9+00 Showing the Berm Being Constructed.  |
| G960098-11-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Side of Apex Showing the Base and a Dozer Walking in the Area.   |
| G960098-12-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 70+00 Showing Berm, Excavated Trench and Underground Spring Filled the Trench.  |
| G960098-13-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 37 Looking at First Lift of Berm.   |
| G960098-14-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 29+00 Showing the Removal of Subbase (Organic Material).  |
| G960098-15-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest Arm at Station 30+00 Looking at Second Lift of Berm.   |

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| G960098-16-O | Ralph M. Parsons Company |                 | 4/26/96 | Southwest End of Arm Showing On-lookers of Progress.  |
| G960098-17-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm Removing Organic Material.  |
| G960098-18-O | Ralph M. Parsons Company |                 | 4/26/96 | Same as Previous Photo Except Closer View.  |
| G960098-19-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm at Station 87+00 Removing Organic Material.   |
| G960098-20-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm at Station 90+00 Showing Removal of Organic Material.   |
| G960098-21-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm at Station 110+00 Looking at East Side of Berm.   |
| G960098-22-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm Showing Top of Berm Close To Finish Grade at Station 111+00.  |
| G960098-23-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm at Station 110+00 Showing West Side of Berm.  |
| G960098-24-O | Ralph M. Parsons Company |                 | 4/26/96 | Southeast Arm at Station 109+00 Looking SE on Top of Berm.  |
| G960099-01-O | Ralph M. Parsons Company |                 | 4/1/96  | Cleaning Equipment at the Southeast Arm.  |
| G960099-02-O | Ralph M. Parsons Company |                 | 4/1/96  | Southeast Arm Excavating Material for 5th Lift at Station 111+00.   |
| G960099-03-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm Placing the 5th Lift at Station 112+00.   |
| G960099-04-O | Ralph M. Parsons Company |                 | 4/1/96  | Southeast Arm Discing and Drying at Station 118+00  |
| G960099-05-O | Ralph M. Parsons Company |                 | 5/31/96 | Same as Previous Picture.   |
| G960099-06-O | Ralph M. Parsons Company |                 | 4/11/96 | Southeast Arm Excavating Fill At Station 110+00.  |
| G960099-07-O | Ralph M. Parsons Company |                 | 4/1/96  | Southeast Arm. Method for Claiming Fill Material From Trench While Avoiding Water.  |
| G960099-08-O | Ralph M. Parsons Company |                 | 4/1/96  | Same as Previous Picture.   |
| G960099-09-O | Ralph M. Parsons Company |                 | 4/1/96  | Quality Supervision in Action.  |
| G960099-10-O | Ralph M. Parsons Company |                 | 4/1/96  | Equipment Brought in for Upkeep of Site Equipment.  |
| G960099-11-O | Ralph M. Parsons Company |                 | 4/1/96  | Southeast Arm. Water Crossing Access Road to Station 110+00.  |
| G960099-12-O | Ralph M. Parsons Company |                 | 4/1/96  | Southeast Arm. Processing Subbase for Drying Between Stations 107+00 and 110+00.  |
| G960099-13-O | Ralph M. Parsons Company |                 | 4/3/96  | Southeast Arm Allowing Subbase Material to Dry Between Discing and Rolling.   |
| G960099-14-O | Ralph M. Parsons Company |                 | 4/3/96  | Southeast Arm. Excavating Fill for Berm.  |
| G960099-15-O | Ralph M. Parsons Company |                 | 4/3/96  | Southeast Arm. Removing Large Roots From Fill.  |
| G960099-16-O | Ralph M. Parsons Company |                 | 4/3/96  | Southeast Arm. Processing Fill at Station 124+00.   |
| G960099-17-O | Ralph M. Parsons Company |                 | 4/3/96  | Southeast Arm. Spreading Fill for Next Lift Beside the Berm at Station 130+00.  |
| G960099-18-O | Ralph M. Parsons Company |                 | 4/3/96  | New Equipment Delivered for Southwest Arm Base Preparation.   |
| G960099-19-O | Ralph M. Parsons Company |                 | 4/3/96  | Southwest Arm Facing Northeast. Beginning Base Preparation at Station 38+00.  |
| G960099-20-O | Ralph M. Parsons Company |                 | 4/3/96  | Southwest Arm. Discing Subbase Material at Station 38+00.   |
| G960099-21-O | Ralph M. Parsons Company |                 | 4/3/96  | Same as Previous Picture.   |
| G960099-22-O | Ralph M. Parsons Company |                 | 4/3/96  | Southwest Arm. Discing Subbase Material at Station 38+00.   |
| G960099-23-O | Ralph M. Parsons Company |                 | 4/3/96  | Southwest Arm. Dressing Up in Preparation for Subbase Work at Station 39+00.  |
| G960100-01-O | Ralph M. Parsons Company |                 | 4/19/96 | Subgrade Preparation for the Beam Tube Slab is Ongoing Along Both the Northwest and the Southwest Arm.  |
| G960100-02-O | Ralph M. Parsons Company |                 | 4/25/96 | Acme Has Completed the Placing of Capillary Rock for the Northwest and the Southwest Arm Beam Tube Slab. Placing and Compacting the Final Lift of Base Material is Ongoing. |
| G960100-03-O | Ralph M. Parsons Company |                 | 5/9/96  | Final Cut of the Base Material to the Bottom of Concrete for the Beam Tube Slab Elevation and Final Compaction is Ongoing for the Northwest and the Southwest Arm.          |
| G960100-04-O | Ralph M. Parsons Company |                 | 4/19/96 | Sand for Concrete Batching is a By-Product of the Gravel Washing and Segregating Operation Which is an On-Site Activity by Acme.  |
| G960100-05-O | Ralph M. Parsons Company |                 | 4/19/96 | 3/4" Gravel is Washed and Segregated From the Rock Delivered to the LIGO Site From the Hanford Gravel Pit Number 6.   |
| G960100-06-O | Ralph M. Parsons Company |                 | 4/19/96 | Adequate Quantities of Sand, 3/4", and 1 1/2" Rock Have Been Stockpiled for Concrete Batching as is Required for the Beam Tube Slabs Slipforming.                           |
| G960100-07-O | Ralph M. Parsons Company |                 | 4/25/96 | Completed Vacuum Equipment Interface Slab at the Northwest Arm Corner Station.  |
| G960100-08-O | Ralph M. Parsons Company |                 | 4/25/96 | Completed Vacuum Equipment Interface Slab at the Southwest Arm Corner Station. Electrical Ductbank Excavation in the Background.  |
| G960100-09-O | Ralph M. Parsons Company |                 | 4/25/96 | View of the Northwest Arm End Station Area. The Covered for Curing Vacuum Equipment Interface Slab in the Background.   |
| G960100-10-O | Ralph M. Parsons Company |                 | 5/9/96  | Final Elevation Has Been Cut for the Beam Tube Slab Bottom of Concrete in Preparation for Setting Rebar.  |
| G960100-11-O | Ralph M. Parsons Company |                 | 5/9/96  | Subcontractor to Acme, Columbia Steel & Iron Started the Layout for the Rebar.  |
| G960100-12-O | Ralph M. Parsons Company |                 | 5/9/96  | Rebar is Set on Dobies to the Proper Spacing. Rebar Mats are Tied to the Dimensions Between the Contraction/Expansion Joints.   |
| G960100-13-O | Ralph M. Parsons Company |                 | 4/25/96 | Excavating Test Holes, in the Area of the Future Septic Leach Field, for the Department of Health Inspector.  |
| G960100-14-O | Ralph M. Parsons Company |                 | 4/25/96 | Inspecting the Soil at the -2' Elevation From the Natural Grade. the Inspection is Witnessed by the Parsons Civil Engineer for Accuracy.                                    |
| G960100-15-O | Ralph M. Parsons Company |                 | 4/25/96 | Soil Analysis by the Department of Health Inspector Continued at the -4' Elevation From Natural Grade.  |
| G960100-16-O | Ralph M. Parsons Company |                 | 4/25/96 | Soil Analysis by the Department of Health Inspector Continued.  |
| G960100-17-O | Ralph M. Parsons Company |                 | 4/25/96 | Soil Analysis by the Department of Health Inspector Continued. Parsons Civil Engineer Continued the Inspection. Picture Same as Previous in a Different Light.              |
| G960100-18-O | Ralph M. Parsons Company |                 | 4/25/96 | Soil Analysis by the Department of Health Inspector was Completed. Area Seems to be Acceptable for a Leach Field. Final Report Will be Issued to Parsons.                   |
| G960101-00-M | Gary Sanders             |                 | 4/25/96 | LIGO 40 Meter Schedule Model.   |
| G960103-00-D | Lisa Sievers             |                 | 4/23/96 | Conceptual Design Part 1: Control System Design   |
| G960105-00-D | Peter Fritschel          |                 | 1/26/96 | Interferometry for Gravity Wave Detection   |
| G960109-00-D | Peter Saulson            |                 | 4/29/96 | Prediction of Test Mass Thermal Noise by Measurement of the Anelastic Aftereffect   |
| G960109-00-D | Mark A. Beilby           |                 | 4/29/96 | Prediction of Test Mass Thermal Noise by Measurement of the Anelastic Aftereffect   |
| G960109-00-D | Alex Abramovici          |                 | 4/29/96 | Prediction of Test Mass Thermal Noise by Measurement of the Anelastic Aftereffect   |
| G960110-00-R | R. Poggiani              |                 | 5/1/96  | Presentation to LIGO Group, dated 1 May 1996  |



| Document No  | Full Name                | ContractorDocNo | Doc Dt  | Full Title  |
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| G960111-00-O |                          |                 | 7/6/95  | Invitation for Ceremony to Commemorate the Inauguration of Construction of the Laser Interferometer Gravitational-Wave Observatory  |
| G960112-00-D | Stan Whitcomb            |                 | 5/3/96  | Nd: YAG Laser Procurement.  |
| G960113-00-F | David Shoemaker          |                 | 5/8/96  | LIGO'S Plans, Schedule, and Capabilities.   |
| G960113-00-F | Mark Coles               |                 | 5/8/96  | LIGO'S Plans, Schedule, and Capabilities.   |
| G960114-00-F | Mark Coles               |                 | 5/1/96  | The Status of LIGO.   |
| G960115-00-M | Barry Barish             |                 | 5/9/96  | LIGO - A View of and from the Bulldozers  |
| G960119-00-P | Bill Althouse            |                 | 5/10/96 | "Minibake" Discussion   |
| G960120-00-F | Mark Coles               |                 | 5/14/96 | Field Mini-Bake Objectives and Motivations.   |
| G960122-01-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 73+00 Showing Small Imprint That the Tire is Making on Compacted Soil.                                     |
| G960122-02-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 73+00 Looking Southwest at Culvert 92+60, at Pipeline Location.  |
| G960122-03-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 73+00 Showing the Quality of Soil After Compaction is Done.  |
| G960122-04-O | Ralph M. Parsons Company |                 | 5/1/96  | Southeast Arm Number One at Station 97+00 Showing Berm Material After Being Plowed Up With Grader to Remove Moisture.               |
| G960122-05-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 79+00 Showing Excavated Material Being Spread to Create a Lift of Berm.                                    |
| G960122-06-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 79+00 Showing Construction of a Lift of Berm.  |
| G960122-07-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 41+00 looking Northeast Showing the Height of Berm About Half the Finished Height.                         |
| G960122-08-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm Number Two at Station 43+00 Showing Organic Material Being Excavated So Acceptable Soil May Be Installed.             |
| G960122-09-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm Showing Bem Construction at Station 98+00.  |
| G960122-10-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm Number Two at Station 98+00 Showing the Extent of Organic Material (Left Side of Photo).                              |
| G960122-11-O | Ralph M. Parsons Company |                 | 5/4/96  | Southwest Arm Number Two at Station 98+00 Showing the Organic Material.   |
| G960122-12-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 82+00 Looking Northeast at Pipeline Crossing in Background. Note Organic Material on Right.                |
| G960122-13-O | Ralph M. Parsons Company |                 | 5/6/96  | Southwest Arm at Station 80+00 Looking Northwest at the Extent of Organic Material on Left.   |
| G960122-14-O | Ralph M. Parsons Company |                 | 5/6/96  | Southwest Arm at Station 121+00 Looking Northeast at Base Preparation Showing Exposing Organic Material to be Removed.              |
| G960122-15-O | Ralph M. Parsons Company |                 | 5/6/96  | Southwest Arm at Station 121+00 Showing Removing Organic Material to Facilitate Berm Base Construction.                             |
| G960122-16-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm at Station 11+00 Excavating Good Material From Trench for Berm Construction.  |
| G960122-17-O | Ralph M. Parsons Company |                 | 5/1/96  | Southwest Arm Number Two at Station 19+00 Building Berm With Excavated Material.  |
| G960122-18-O | Ralph M. Parsons Company |                 | 5/1/96  | Birds and Cows Watching and Discussing the New Look of Their Home.  |
| G960122-19-O | Ralph M. Parsons Company |                 | 5/4/96  | Southwest Arm at Station 27+00 Showing Disked Material on Berm Drying Out for Compaction.   |
| G960122-20-O | Ralph M. Parsons Company |                 | 5/4/96  | Southeast Arm at Station 97+00 Showing Organic Material Removed and Acceptable Material Installed in Its Place.                     |
| G960122-21-O | Ralph M. Parsons Company |                 | 5/4/96  | Southeast Arm at Station 100+00 Looking Southeast at Berm Approximately One Foot Below Finish Grade.                                |
| G960122-22-O | Ralph M. Parsons Company |                 | 5/1/96  | Southeast Arm at Station 116+00 Plowing a Low Area After Rain to Dry Out Soil Base for Compaction.                                  |
| G960122-23-O | Ralph M. Parsons Company |                 | 5/4/96  | Southeast Arm at Station 87+00 Showing Disked Material in Foreground and Compaction in the Background.                              |
| G960122-24-O | Ralph M. Parsons Company |                 | 5/3/96  | Southeast Arm at Station 86+00 Showing Berm Building Operation and Clear Skies.   |
| G960124-01-O | Ralph M. Parsons Company |                 | 5/11/96 | The Subgrade Preparation is Completed and the Southwest Arm is Ready for the Rebar Installation.                                    |
| G960124-02-O | Ralph M. Parsons Company |                 | 5/15/96 | Typical Rebar Mats Installed Along the Southwest Arm.   |
| G960124-03-O | Ralph M. Parsons Company |                 | 5/15/96 | General Process of the Rebar Mat Installation.  |
| G960124-04-O | Ralph M. Parsons Company |                 | 5/18/96 | Placing the Rebar for the Beam Tube Enclosure Support Slab. Alternate Sections of Mats Were Placed Until the Dowel Baskets Arrived. |
| G960124-05-O | Ralph M. Parsons Company |                 | 5/18/96 | Typical Installation of the Dowel Basket at the Slab Joint Location.  |
| G960124-06-O | Ralph M. Parsons Company |                 | 5/18/96 | Completed Section of the Rebar Installed Along the Southwest Arm.   |
| G960124-07-O | Ralph M. Parsons Company |                 | 5/18/96 | Close-up of the Typical Rebar Mat.  |
| G960124-08-O | Ralph M. Parsons Company |                 | 5/18/96 | Dowel Baskets Arrived Assembled and Ready for Installation.   |
| G960124-09-O | Ralph M. Parsons Company |                 | 5/18/96 | Another and Final View of the Installed Rebar Mats.   |
| G960124-10-O | Ralph M. Parsons Company |                 | 5/15/96 | The Beam Tube Access Road Subgrade Preparation With ___ of Cap Rock and 4" of Road Base Material.                                   |
| G960124-11-O | Ralph M. Parsons Company |                 | 5/19/96 | Completed the Temporary Batchplant Footings.  |
| G960124-12-O | Ralph M. Parsons Company |                 | 5/15/96 | Close-up of the Dowel Basket at a Typical Beam Tube Slab Joint Location.  |
| G960124-13-O |                          |                 | 5/11/96 | No Caption Provided   |
| G960124-14-O | Ralph M. Parsons Company |                 | 5/14/96 | Batch Plant Equipment Arrival.  |
| G960124-15-O | Ralph M. Parsons Company |                 | 5/11/96 | Conveyors for the Gravel and Sand Delivery to the Batch Plant Arrived.  |
| G960124-16-O | Ralph M. Parsons Company |                 | 5/16/96 | One Hundred Ton Lampson Crane is Assisting in the Batch Plant Erection.   |
| G960124-17-O | Ralph M. Parsons Company |                 | 5/18/96 | Batch Plant Erection Continued.   |
| G960124-18-O | Ralph M. Parsons Company |                 | 5/15/96 | Batch Plant Erection Virtually Completed.   |
| G960124-19-O | Ralph M. Parsons Company |                 | 5/18/96 | The Assembly of the Concrete Belt Placer Continued Near the Southwest Arm End Building.   |
| G960124-20-O | Ralph M. Parsons Company |                 | 5/18/96 | Different view of the Belt Placer.  |
| G960124-21-O | Ralph M. Parsons Company |                 | 5/18/96 | Hydraulic Crane is Assisting in the Assembly of the Belt Placer.  |
| G960124-22-O | Ralph M. Parsons Company |                 | 5/11/96 | Ductile-Iron Pipe With Mechanical Joint Arrived.  |
| G960124-23-O | Ralph M. Parsons Company |                 | 5/16/96 | Pipe Bed Preparation for the Ductile-Iron Underground Fire Line Crossing Under the Beam Tube Slab.                                  |
| G960124-24-O | Ralph M. Parsons Company |                 | 5/16/96 | Fire Line Installed and Ready for Hydro Test.   |
| G960124-25-O | Ralph M. Parsons Company |                 | 5/11/96 | Duct Bank Trench. Previously Damaged Grounding Cable Was Repaired.  |



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| G960124-26-O | Ralph M. Parsons Company |                 | 5/16/96 | Benton PUD Installed Fuse Box Near the Corner Station.  |
| G960124-27-O | Ralph M. Parsons Company |                 | 5/11/96 | Benton PUD Installed Electrical Bake-Out Vault Near the Corner Station.   |
| G960124-28-O | Ralph M. Parsons Company |                 | 5/11/96 | Completed Beam Tube Enclosure Segment at the Acme Precast Yard.   |
| G960124-29-O | Ralph M. Parsons Company |                 | 5/11/96 | Exterior View of the Beam Tube Enclosure Segments.  |
| G960124-30-O | Ralph M. Parsons Company |                 | 5/17/96 | Q/C Work Started for the Beam Tube Enclosure Segments.  |
| G960124-31-O | Ralph M. Parsons Company |                 | 5/15/96 | CBI Mobilizing Their Offices at Site.   |
| G960124-32-O | Ralph M. Parsons Company |                 | 5/15/96 | CBI Mobilizing Their Offices at Site.   |
| G960124-33-O | Ralph M. Parsons Company |                 | 5/16/96 | CBI Mobilizing Their Offices at Site.   |
| G960127-00-B | Larry Jones              |                 | 5/29/96 | Viewgraphs for Beam Tube from PC Meeting of 29 May 1996   |
| G960130-00-D | Hans Bachor              |                 | 5/24/96 | An Interferometric Displacement Sensor for Test Mass Location   |
| G960130-00-D | David Mcclelland         |                 | 5/24/96 | An Interferometric Displacement Sensor for Test Mass Location   |
| G960130-00-D | Mal Gray                 |                 | 5/24/96 | An Interferometric Displacement Sensor for Test Mass Location   |
| G960131-02-O | Ralph M. Parsons Company |                 | 5/22/96 | Acme's On-Site Batch Plant Ready for Operation.   |
| G960131-03-O | Ralph M. Parsons Company |                 | 5/22/96 | The Gravel and Sand Supply Conveyors for Batching Concrete.   |
| G960131-04-O | Ralph M. Parsons Company |                 | 5/22/96 | On Site Batch Plant Control Center, Personnel Working on Final Set-up.  |
| G960131-05-O | Ralph M. Parsons Company |                 | 5/22/96 | The Belt Placer is Set in Position for Paving Activities.   |
| G960131-06-O | Ralph M. Parsons Company |                 | 5/22/96 | The Belt Placer Alignment is Guided by Wire for Location and Elevation of the Required Concrete Quantity.                       |
| G960131-07-O | Ralph M. Parsons Company |                 | 5/22/96 | Close-Up View of the Concrete Supply Placing Belt.  |
| G960131-08-O | Ralph M. Parsons Company |                 | 5/22/96 | Acme's Paver, a View of the Concrete Vibrators.   |
| G960131-09-O | Ralph M. Parsons Company |                 | 5/22/96 | The Curing Compound Sprayer is Ready for Operation.   |
| G960131-10-O | Ralph M. Parsons Company |                 | 5/22/96 | Paving Activities are Ongoing.  |
| G960131-11-O | Ralph M. Parsons Company |                 | 5/22/96 | The Dowel Basket Tie Rod Was Cut Prior to Paving.   |
| G960131-12-O | Ralph M. Parsons Company |                 | 5/22/96 | The Dowel Baskets Were Nailed Into Grade to Retain Location During the Paving Activities.                                       |
| G960131-13-O | Ralph M. Parsons Company |                 | 5/21/96 | Actual Dowel Basket Nailing Activity.   |
| G960131-14-O | Ralph M. Parsons Company |                 | 5/23/96 | Final Quality Control Activities and Punchlist Check Off.   |
| G960131-15-O | Ralph M. Parsons Company |                 | 5/22/96 | Final Quality Control Activities and Punchlist Check Off.   |
| G960131-16-O | Ralph M. Parsons Company |                 | 5/22/96 | Final Quality Control Activities and Punchlist Check Off.   |
| G960131-17-O | Ralph M. Parsons Company |                 | 5/23/96 | Batch Plant Operation Started on May 23, 1996 Along the Southwest Arm.  |
| G960131-18-O | Ralph M. Parsons Company |                 | 5/23/96 | Belt Conveyors Are Supplying the Gravel and Sand to the Mixing Chamber.   |
| G960131-19-O | Ralph M. Parsons Company |                 | 5/23/96 | The Gravel and Sand Hoppers are Continuously Filled by a Loader.  |
| G960131-20-O | Ralph M. Parsons Company |                 | 5/23/96 | Concrete Transportation Activities, Acme is Utilizing Nine Trucks for the Slipforming Activities.                               |
| G960131-21-O | Ralph M. Parsons Company |                 | 5/23/96 | Trucks are Loaded With Batched Concrete.  |
| G960131-22-O | Ralph M. Parsons Company |                 | 5/23/96 | Closer View of the Concrete Loading Activity.   |
| G960131-23-O | Ralph M. Parsons Company |                 | 5/23/96 | The Concrete Slab is Being Finished by the Paver, Some Minor Hand Finishing is Necessary Especially Near the Alignment Grooves. |
| G960131-24-O | Ralph M. Parsons Company |                 | 5/23/96 | The Concrete is Transported by Truck to the Belt Placer. the Trucks are Carrying Between 9 and 10 CY of Concrete.               |
| G960131-25-O | Ralph M. Parsons Company |                 | 5/23/96 | The Concrete Paver Completes the Final Trowel and the Burlap Provides the Finished Concrete Appearance.                         |
| G960131-26-O | Ralph M. Parsons Company |                 | 5/23/96 | The Curing Compound is Placed After Following the Final Concrete Finishing.   |
| G960131-27-O | Ralph M. Parsons Company |                 | 5/23/96 | Hand Finishing is Required at Some Locations.   |
| G960131-28-O | Ralph M. Parsons Company |                 | 5/23/96 | Interface of the Beam Tube Slab and the Vacuum Equipment Anchor Slab.   |
| G960131-29-O | Ralph M. Parsons Company |                 | 5/23/96 | Completed Beam Tube Slab Along the Southwest Arm.   |
| G960131-30-O | Ralph M. Parsons Company |                 | 5/23/96 | Another View of the Completed Beam Tube Slab, Southwest Arm.  |
| G960131-31-O | Ralph M. Parsons Company |                 | 5/23/96 | Typical View of the Concrete Being Placed by the Belt Placer.   |
| G960131-32-O | Ralph M. Parsons Company |                 | 5/23/96 | Another View of the Completed Slab.   |
| G960131-34-O | Ralph M. Parsons Company |                 | 5/24/96 | Typical Re-Start of Concrete at a Construction Joint.   |
| G960132-01-O | Ralph M. Parsons Company |                 | 5/30/96 | 12" Diameter Pipe Sleeve Was Installed Under the Beam Tube Slab at the Northwest Arm Near the Corner Station.                   |
| G960132-02-O |                          |                 | 5/30/96 | 12" Diameter Pipe Sleeve Was Installed Under the Beam Tube Slab at the Northwest Arm Near the Corner Station.                   |
| G960132-03-O | Ralph M. Parsons Company |                 | 5/30/96 | 12" Diameter Pipe Sleeve Was Installed Under the Beam Tube Slab at the Northwest Arm Near the Corner Station.                   |
| G960132-04-O | Ralph M. Parsons Company |                 | 5/30/96 | Stub-up of the Bake-out Power Conduit at the Service Entrance.  |
| G960132-05-O | Ralph M. Parsons Company |                 | 5/29/96 | Typical Concrete Duct Bank.   |
| G960132-06-O | Ralph M. Parsons Company |                 | 6/4/96  | View From the Service Entrance to the Bake-out Box. (Typical)   |
| G960132-07-O | Ralph M. Parsons Company |                 | 5/23/96 | DOE Personnel Are Taking Water Samples at Well Number One.  |
| G960132-08-O | Ralph M. Parsons Company |                 | 5/23/96 | CBI Temporary Power Supply Trench.  |
| G960132-09-O | Ralph M. Parsons Company |                 | 5/22/96 | The PUD Power Cable, Installed at the Well Number One.  |
| G960132-10-O | Ralph M. Parsons Company |                 | 6/4/96  | Enclosure For the Steam Generating Equipment at the Acme Precast Yard.  |
| G960132-11-O | Ralph M. Parsons Company |                 | 6/4/96  | View Through the "C" Type Beam Tube Enclosure Module Transport Equipment.   |
| G960132-12-O | Ralph M. Parsons Company |                 | 6/4/96  | View of Newly Casted Type "C" Enclosure Modules.  |
| G960132-13-O | Ralph M. Parsons Company |                 | 6/4/96  | Form Removal Activity of Newly Casted Type "C" Modules.   |

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| G960132-14-O | Ralph M. Parsons Company |                 | 6/4/96  | Another View of the Form Removal Activities.  |
| G960132-15-O | Ralph M. Parsons Company |                 | 6/4/96  | Newly Casted Type "C" Enclosure Modules.  |
| G960132-16-O | Ralph M. Parsons Company |                 | 5/29/96 | No Captions.  |
| G960132-17-O | Ralph M. Parsons Company |                 | 6/4/96  | General View of the Completed Beam Tube Enclosures.   |
| G960132-18-O | Ralph M. Parsons Company |                 | 5/29/96 | No Caption.   |
| G960135-01-O | Ralph M. Parsons Company |                 | 5/28/96 | At One Location a Natural Crack Developed at the Time When the Design Joint Was Cut. The Designed Joint Was Sealed and the Natural Crack Will Be the Expansion Joint. |
| G960135-02-O | Ralph M. Parsons Company |                 | 5/29/96 | Saw-Cutting Activities Are Ongoing.   |
| G960135-03-O | Ralph M. Parsons Company |                 | 5/29/96 | Another View of the Saw-Cutting Activity.   |
| G960135-04-O | Ralph M. Parsons Company |                 | 6/4/96  | At the Service Entrance Location the Electrical Contractor Raised the Bake-Out Conduit.   |
| G960135-05-O | Ralph M. Parsons Company |                 | 6/4/96  | Typical Bed Preparation for the Service Entrance Slab.  |
| G960135-06-O | Ralph M. Parsons Company |                 | 5/30/96 | The Equipment That Was Utilized to Provide the Dowel Hole at the Service Entrances.   |
| G960135-07-O | Ralph M. Parsons Company |                 | 5/24/98 | Typical Fire Water Pipe Joint Location.   |
| G960135-08-O | Ralph M. Parsons Company |                 | 5/24/96 | Typical Installed End Cup of the Fire Water Pipe.   |
| G960135-09-O | Ralph M. Parsons Company |                 | 5/24/96 | Typical Pipe End Cup.   |
| G960135-10-O | Ralph M. Parsons Company |                 | 5/24/96 | Fire Water Line Hydro Test Connection.  |
| G960135-11-O | Ralph M. Parsons Company |                 | 5/24/96 | Fire Water Line During the Hydrotest Activities.  |
| G960135-12-O | Ralph M. Parsons Company |                 | 5/24/96 | Leak Check at the Flange During the Hydrotest Activities.   |
| G960135-13-O | Ralph M. Parsons Company |                 | 5/29/96 | After the Hydrotest Was Completed the Pipe Was Wrapped and Backfill Commenced.  |
| G960135-14-O | Ralph M. Parsons Company |                 | 5/29/96 | After the Hydrotest Was Completed the Pipe Was Wrapped and Backfill Commenced.  |
| G960135-15-O | Ralph M. Parsons Company |                 | 5/29/96 | After the Hydrotest Was Completed the Pipe Was Wrapped and Backfill Commenced.  |
| G960136-00-D | Seiji Kawamura           |                 | 6/6/96  | Suspension Preliminary Design Review  |
| G960136-00-D | Fred Raab                |                 | 6/6/96  | Suspension Preliminary Design Review  |
| G960136-00-D | Janeen Hazel             |                 | 6/6/96  | Suspension Preliminary Design Review  |
| G960137-00-E | Albert Lazzarini         |                 | 5/21/96 | Quarterly Science & Integration Meeting at MIT, 20-21 May 1996  |
| G960138-00-D |                          |                 | 6/25/96 | Core Optic Material - Quantity/Type Summary.  |
| G960139-00-M | Barry Barish             |                 | 5/20/96 | The Detection of Gravitational Waves - Academic Lecture Series - Cern, 20-24 May 1996   |
| G960142-02-O | Ralph M. Parsons Company |                 | 5/7/96  | Southwest Arm at Station 36+00 Looking Northeast at Trench Excavation.  |
| G960142-03-O | Ralph M. Parsons Company |                 | 5/7/96  | Southeast Arm Looking Northwest at Station 110+00.  |
| G960142-04-O | Ralph M. Parsons Company |                 | 5/7/96  | Southeast Arm at Station 110+00 Looking Southwest at Compaction Roller Working Material to Meet Specifications.   |
| G960142-05-O | Ralph M. Parsons Company |                 | 5/7/96  | Southwest Arm at Station 120+00 Showing Excavating and Spreading Berm Fill Material.  |
| G960142-06-O | Ralph M. Parsons Company |                 | 5/8/96  | Southeast Arm at Station 105+00 Looking Northwest at Spreading and Drying Fill Material.  |
| G960142-07-O | Ralph M. Parsons Company |                 | 5/8/96  | Southwest Arm at Station 119+00 Drying a New Lift of Material.  |
| G960142-08-O | Ralph M. Parsons Company |                 | 5/8/96  | Southwest Arm at Station 109+00 Showing Disked Material Ready for Compaction Roller.  |
| G960142-09-O | Ralph M. Parsons Company |                 | 5/8/96  | This is the New Challenger That Replaced the Dozers for Pulling Disks. Note: the Rubber Drive Train.  |
| G960142-10-O | Ralph M. Parsons Company |                 | 5/17/96 | Southwest Arm at Station 118+00 Showing Preparation for Soil Compaction Test.   |
| G960142-11-O | Ralph M. Parsons Company |                 | 5/17/96 | Southwest Arm at Station 109+00 Showing Excavation of Trench for Fill.  |
| G960142-12-O | Ralph M. Parsons Company |                 | 7/8/96  | Southwest Arm at Station 109+00 HO Team Reviewing Site Progress. Left to Right, Fred Asiri, John Blasius, and Otto Matherny.  |
| G960142-13-O | Ralph M. Parsons Company |                 | 5/20/96 | Southwest Arm at Station 120+00 Conducting Soil Compaction Test.  |
| G960142-14-O | Ralph M. Parsons Company |                 | 5/20/96 | Southwest Arm at Station 113+00 Looking Northeast at Compacted Berm Fill.   |
| G960142-15-O | Ralph M. Parsons Company |                 | 5/22/96 | Southeast Arm at Apex Looking at Base Prep Being Done.  |
| G960142-16-O | Ralph M. Parsons Company |                 | 5/22/96 | Southwest Arm at Station 2+00 Looking Southwest at Berm as it Enters Apex Area.   |
| G960142-17-O | Ralph M. Parsons Company |                 | 5/8/96  | Southeast Arm at Station 108+00 Looking Northwest at Challenger Disking Moist Material.   |
| G960142-18-O | Ralph M. Parsons Company |                 | 5/8/96  | Southeast Arm at Station 96+00 Showing Disking Operation.   |
| G960142-19-O | Ralph M. Parsons Company |                 | 5/8/96  | Southeast Arm Showing the Fine Material Flying From Disk Which Enhances the Drying Process.   |
| G960142-20-O | Ralph M. Parsons Company |                 | 5/8/96  | Southwest Arm at Station 126+00 Showing Berm Material Being Spread, Another Lift!   |
| G960142-21-O | Ralph M. Parsons Company |                 | 5/8/96  | Southeast Arm at Station 108+00 Looking Southeast, Showing Another Lift Being Placed.   |
| G960142-22-O | Ralph M. Parsons Company |                 | 5/8/96  | Southwest Arm at Station 76+00 Looking Southwest at Compacted Berm Fill Just Prior to Compaction Test.  |
| G960142-23-O | Ralph M. Parsons Company |                 | 5/8/96  | Southwest Arm at the Pipeline Crossing Looking South as Pipeline Intersects the Berm.   |
| G960142-24-O | Ralph M. Parsons Company |                 | 5/7/96  | Southeast Arm at Dixie Power Line Crossing Showing New Location of 80 Foot Pole to Make More Room for Construction, (See Red Circle).                                 |
| G960146-01-I | David Shoemaker          |                 | 10/1/95 | Phase Noise Interferometer (PNI), Vibration Isolation Stack.  |
| G960146-02-I | David Shoemaker          |                 | 10/1/95 | Phase Noise Interferometer (PNI), Suspension and Actuators.   |
| G960146-03-I | David Shoemaker          |                 | 10/1/95 | Barry Controls Stacks Isolator, Installed on Phase Noise Interferometer (PNI).  |
| G960146-04-I | David Shoemaker          |                 | 10/1/95 | Phase Noise Interferometer (PNI) in MIT Vacuum System.  |
| G960146-05-I | David Shoemaker          |                 | 10/1/95 | Phase Noise Interferometer (PNI) Suspended Optical Components.  |
| G960147-01-O | Ralph M. Parsons Company |                 | 11/1/95 | Aerial View of Hanford Site.  |
| G960147-02-O | Ralph M. Parsons Company |                 | 11/1/95 | Aerial View of Hanford Site.  |
| G960147-03-O | Ralph M. Parsons Company |                 | 11/1/95 | Aerial View of Hanford Site.  |

| Document No  | Full Name                     | ContractorDocNo  | Doc Dt   | Full Title  |
|--------------|-------------------------------|------------------|----------|---|
| G960147-04-O | Ralph M. Parsons Company      |                  | 11/1/95  | Aerial View of Hanford Site.  |
| G960147-05-O | Ralph M. Parsons Company      |                  | 11/1/95  | Aerial View of Hanford Site.  |
| G960147-06-O | Ralph M. Parsons Company      |                  | 11/1/95  | Aerial View of Hanford Site.  |
| G960148-01-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-02-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-03-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-04-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-05-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-06-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-07-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960148-08-O | California Institute of Tech. |                  | 6/28/96  | BE/BTE Mock-Up in Synchrotron Lab.  |
| G960149-01-O | Ralph M. Parsons Company      |                  | 6/12/96  | Southwest Arm at Station 44+00 Looking West at 60" RCP Culverts.                          |
| G960151-00-M | Barry Barish                  |                  | 5/27/96  | LIGO - Status and Plans (OMNI-I Workshop in Sao Jose dos Campos, Brazil)                  |
| G960171-01-F |                               |                  | 7/22/96  | Louisiana Building Design - Technical Review, 22 July 1996                                |
| G960173-00-D | William O. Miller             |                  | 6/26/96  | SEI Work Plan Review  |
| G960175-00-D | Luca Gammaitoni               |                  | 7/26/96  | VIRGO Sensitivity Curve   |
| G960817-B-O  | Ralph M. Parsons Company      | LA-G-002, Rev. B | 6/14/96  | Livingston Facility Final Design Package - General, Drawing, Index Sheet 2.               |
| G960855-A-O  | Ralph M. Parsons Company      | LA-C-041, Rev. A | 6/14/96  | Livingston Facility Final Design Package - Civil, Southeast Arm, Pump-Station, Plot Plan. |
| G961040-A-O  |                               | LA-E-404, Rev. A | 6/14/96  | Livingston Facility Final Design Package - Electrical, Details.                           |
| L910001-00-O |                               |                  | 3/1/91   | Hanford, Washington Site Proposal   |
| L910002-00-O | A. A. Riewe                   |                  | 3/15/91  | Suitability Assessments for Multiple LIGO Potential Sites                                 |
| L910003-00-O |                               |                  | 5/1/91   | Suitability Maps for Southwestern North Dakota for LIGO Project Site                      |
| L920001-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports - Stan Whitcomb, 1992  |
| L920002-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Robbie Vogt, 1992  |
| L920003-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Coleman Shannon, 1992  |
| L920004-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Rick Savage, 1992  |
| L920005-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Robert Rossmanith, 1992  |
| L920006-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Keith Maslin, 1992   |
| L920007-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Andy Kuhnert, 1992   |
| L920008-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Doug Jungwirth, 1992   |
| L920009-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Larry Jones, 1992  |
| L920010-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Kathleen Johnston, 1992  |
| L920011-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Henrich Heitmann, 1992   |
| L920012-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Michael Fisher, 1992   |
| L920013-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Lawrence Chu, 1992   |
| L920014-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Jeffrey Casey, 1992  |
| L920015-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Jordan Camp, 1992  |
| L920016-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Robert Cady, 1992  |
| L920017-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Kent Blackburn, 1992   |
| L920018-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for John Barr, 1992  |
| L920019-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Bill Althouse, 1992  |
| L920020-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Volker Schmidt, 1992   |
| L920021-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Norbert Solomonson, 1992                                       |
| L920022-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Fred Raab, 1992  |
| L920023-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Robert Pierce, 1992  |
| L920024-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Irena Petrac, 1992   |
| L920025-00-A | I. Baldon                     |                  | 12/31/92 | Travel Expense Reports for Alex Abramovici, 1992  |
| L920026-00-A | Robbie Vogt                   |                  | 9/3/92   | Request for Official Approval of Foreign Travel   |
| L920027-00-A | Robbie Vogt                   |                  | 4/27/92  | Request for Official Approval of Foreign Travel   |
| L920028-00-A | Robbie Vogt                   |                  | 4/28/92  | Request for Official Approval of Foreign Travel   |
| L920029-00-A | Robbie Vogt                   |                  | 4/27/92  | Request for Official Approval of Foreign Travel   |
| L930001-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for John Worden, 1993  |
| L930002-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for Stan Whitcomb, 1993  |
| L930003-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for Robbie Vogt, 1993  |
| L930004-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for Bill Tyler, 1993   |
| L930005-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for Kip Thorne, 1993   |
| L930006-00-A | I. Baldon                     |                  | 12/31/93 | Travel Expense Reports for Rick Savage, 1993  |

| Document No  | Full Name        | ContractorDocNo | Doc Dt   | Full Title   |
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| L930007-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Joan Sage, 1993   |
| L930008-00-A | Robbie Vogt      |                 | 6/28/93  | Request for Official Approval of Foreign Travel - Doug Jungwirth   |
| L930009-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Boude Moore, 1993   |
| L930010-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Carl Lewis, 1993  |
| L930011-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Andy Kuhnert, 1993  |
| L930012-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Doug Jungwirth, 1993  |
| L930013-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Li Ju, 1993   |
| L930014-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Larry Jones, 1993   |
| L930015-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Mary Humphrey, 1993   |
| L930016-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Greg Hiscott, 1993  |
| L930017-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Report for Ed Goldwasser, 1993  |
| L930018-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Report for Gene Giberson, 1993  |
| L930019-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Report for Richard Fischer, 1993  |
| L930020-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Thomas W. Eagar, 1993   |
| L930021-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports For Rolf Bork, 1993   |
| L930022-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Fred Asiri, 1993  |
| L930023-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for W. E. Althouse, 1993  |
| L930024-00-A | I. Baldon        |                 | 12/31/95 | Travel Expense Reports for Alex Abramovici, 1993   |
| L930025-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Gerry Stapfer, 1993   |
| L930027-00-A | Robbie Vogt      |                 | 6/28/93  | Request for Official Approval of Foreign Travel - Stan Whitcomb  |
| L930028-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Tony Riewe, 1993  |
| L930029-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Fred Raab, 1993   |
| L930030-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Irena Petrac, 1993  |
| L930031-00-A | Robbie Vogt      |                 | 6/28/93  | Request for Official Approval of Foreign Travel - Fred Raab  |
| L930032-00-A | Robbie Vogt      |                 | 4/20/93  | Request for Official Approval of Foreign Travel - Robbie Vogt  |
| L930033-00-A | Robbie Vogt      |                 | 4/20/93  | Request for Official Approval of Foreign Travel - Robbie Vogt  |
| L940001-00-M | Gary Sanders     |                 | 11/4/94  | LIGO Documents   |
| L940002-00-P | Phil Lindquist   |                 | 11/1/94  | Ops/Pre-Ops Combined Cost Estimate   |
| L940003-00-P | Stan Whitcomb    |                 | 9/1/94   | Transmittal of LIGO Project Quarterly Report (LIGO-M940001-00-P)   |
| L940004-00-P | Gerry Stapfer    |                 | 12/5/94  | WBS Title Changes  |
| L940005-00-P | Gerry Stapfer    |                 | 12/8/94  | Cost Book Update   |
| L940006-00-B | Larry Jones      |                 | 11/22/94 | Revision of the WBS Dictionary - Beam Tube Subject Description   |
| L940007-00-P | Phil Lindquist   |                 | 11/17/94 | Revision of the WBS Dictionary - Level 2 and3  |
| L940008-00-M | M. Torres        |                 | 12/22/94 | Transmittal of LIGO proposal, Management Plan and Cost Book for September 1994                               |
| L940009-00-U |                  |                 |          |  |
| L940010-00-U |                  |                 |          |  |
| L940011-00-U |                  |                 |          |  |
| L940012-00-U |                  |                 |          |  |
| L940013-00-U |                  |                 |          |  |
| L940014-00-U |                  |                 |          |  |
| L940015-00-U |                  |                 |          |  |
| L940016-00-U |                  |                 |          |  |
| L940017-00-M | Dr. David Berley |                 | 10/26/94 | Final Report of the Special Emphasis Panel convened by NSF to validate cost, schedule and management of LIGO |
| L940018-00-P | Phil Lindquist   |                 | 12/16/94 |  |
| L940018-00-U |                  |                 |          |  |
| L940019-00-M |                  |                 | 10/24/94 | Final Report to the NSF  |
| L940020-00-M | Thomas Kirk      |                 | 10/24/94 | Transmittal of Final Report of the NSF Review Committee  |
| L940021-00-M | Dr. David Berley |                 | 10/26/94 | Transmittal of Final NSF Review Committee Report   |
| L940022-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Mike Zucker, 1994   |
| L940023-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for John Worden, 1994   |
| L940024-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Stan Whitcomb, 1994   |
| L940025-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Robbie Vogt, 1994   |
| L940026-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Kip Thorne, 1994  |
| L940027-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Rick Savage, 1994   |
| L940028-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Gary Sanders, 1994  |
| L940029-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Parke Rohrer, 1994  |
| L940030-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Doug Murray, 1994   |

| Document No  | Full Name        | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|------------------|-----------------|----------|--|
| L940031-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Dr. G> Mitselmakher, 1994                                   |
| L940032-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for David McClelland, 1994                                      |
| L940033-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Phil Lindquist, 1994  |
| L940034-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Carl Lewis, 1994  |
| L940035-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Albert Lazzarini, 1994                                      |
| L940036-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Larry Jones, 1994   |
| L940037-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Jay Heefner, 1994   |
| L940038-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Edwin Goldwasser, 1994                                      |
| L940039-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Gene Giberson, 1994   |
| L940040-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Mike Gamble, 1994   |
| L940041-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Richard Fischer, 1994                                       |
| L940042-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Thomas Eager, 1994  |
| L940043-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Fred Dylla, 1994  |
| L940044-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Rolf Bork, 1994   |
| L940045-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Ken Blackburn, 1994   |
| L940046-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Barry Barish, 1994  |
| L940047-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Fred Asiri, 1994]   |
| L940048-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Bill Althouse, 1994   |
| L940049-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Lew Allen, 1994   |
| L940050-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Alex Abramovici, 1994                                       |
| L940051-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Gerry Stapfer, 1994   |
| L940052-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Volker Schmidt, 1994  |
| L940053-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Bob Spero, 1994   |
| L940054-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Tony Riewe, 1994  |
| L940055-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Martin Regehr, 1994   |
| L940056-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Fred Raab, 1994   |
| L940057-00-A | I. Baldon        |                 | 12/31/94 | Travel Expense Reports for Irena Petrac, 1994  |
| L950000-00-U | David Shoemaker  |                 | 2/23/95  | Seismic Isolation Development, DRAFT Paper   |
| L950001-00-U | Gary Sanders     |                 | 1/19/95  | LIGO Correspondence Templates and Correspondence Standards                             |
| L950002-00-U | Barry Barish     |                 | 1/19/95  | Approval Process for Publications  |
| L950003-00-U | Gary Sanders     |                 | 2/1/95   | LIGO Document Numbering Scheme   |
| L950004-00-U | Gerry Stapfer    |                 | 1/18/95  | Beam Tube Air Signature Issue  |
| L950005-00-U | Albert Lazzarini |                 | 1/23/95  | Thank you for demonstration of EXCEL-based trade study software package                |
| L950006-00-U | Albert Lazzarini |                 | 1/23/95  | Recommended use of IMOS within MatLab for structure of simulation package              |
| L950007-00-U | Albert Lazzarini |                 | 1/19/95  | Baffle Design Tasks and Schedule   |
| L950008-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Georg Rupschus, 1993  |
| L950008-00-U |                  |                 |          |  |
| L950009-00-M |                  |                 | 2/9/95   | Attachment I - MIT/CIT MOU, specific roles and responsibilities for the MIT LIGO group |
| L950010-00-U | Jay Heefner      |                 | 1/20/95  | Draft CDS Meeting Minutes for January 20, 1995   |
| L950011-00-U | Gary Sanders     |                 | 1/20/95  | Acting Project Manager   |
| L950012-00-U |                  |                 |          |  |
| L950013-00-U |                  |                 |          |  |
| L950014-00-U | Robbie Vogt      |                 | 1/24/95  | Agenda for R&D/Detector Section of Science/Integration Meeting                         |
| L950015-00-U | Rick Savage      |                 | 1/21/95  | Approval of letter to potential metrology consultant, Prof. Kathryn Creath             |
| L950016-00-U | Rick Savage      |                 | 1/24/95  | Request for expertise in optical metrology   |
| L950017-00-U | Phil Lindquist   |                 | 1/25/95  | End of FY 1994 Annual Report, DRAFT  |
| L950018-00-U | Alex Abramovici  |                 | 1/25/95  | Additional PSL specifications  |
| L950019-00-U |                  |                 |          |  |
| L950020-00-B | Mark Coles       |                 | 2/7/96   | Strategy to Minimize Bema Tube Risk  |
| L950020-00-U | Rick Savage      |                 | 1/26/95  | Summary of 1/24/95 Core Optics Components Meeting                                      |
| L950021-00-U | Fred Raab        |                 | 1/26/95  | Level of Occupancy for the LIGO Sites in Washington and Louisiana                      |
| L950022-00-U | John Worden      |                 | 1/26/95  | Work Authorization for LIGO Vacuum Equipment Proposal Evaluations                      |
| L950023-00-U | Alex Abramovici  |                 | 1/26/95  | Viability of argon ion lasers  |
| L950024-00-U | Alex Abramovici  |                 | 1/27/95  | Optics related effort at Spectra Physics   |
| L950025-00-U | Rick Savage      |                 | 1/26/95  | Summary of 1/24/95 Core Optics Components Meeting                                      |
| L950026-00-A | I. Baldon        |                 | 12/31/93 | Travel Expense Reports for Volker Schmidt, 1993  |
| L950026-00-U |                  |                 |          |  |

| Document No  | Full Name       | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-----------------|-----------------|----------|---|
| L950027-00-A | I. Baldon       |                 | 12/31/93 | Travel Expense Reports for Bob Spero, 1993  |
| L950027-00-U |                 |                 |          |   |
| L950028-00-U |                 |                 |          |   |
| L950029-00-U |                 |                 |          |   |
| L950030-00-U |                 |                 |          |   |
| L950031-00-D | Robbie Vogt     |                 | 1/27/95  | PSL DRR   |
| L950032-00-U |                 |                 |          |   |
| L950033-00-U | Phil Lindquist  |                 | 1/30/95  | Computer Committee Meeting Minutes, January 30, 1995  |
| L950034-00-U | Gary Sanders    |                 | 1/30/95  | Reference letter for G.R. Chapman's request for permanent resident alien status - ADMINISTRATIVE CONFIDENTIAL |
| L950035-00-U | Greg Hiscott    |                 | 2/1/95   | Phone Request for Bridge Annex Room 35  |
| L950036-00-U |                 |                 |          |   |
| L950037-00-U |                 |                 |          |   |
| L950038-00-U |                 |                 |          |   |
| L950039-00-U |                 |                 |          |   |
| L950040-00-U | Linda Turner    |                 | 2/14/95  | Start-Up Procedures for Incoming and Outgoing Documentation   |
| L950041-00-U |                 |                 |          |   |
| L950042-00-U |                 |                 |          |   |
| L950043-00-U |                 |                 |          |   |
| L950044-00-U |                 |                 |          |   |
| L950045-00-U |                 |                 |          |   |
| L950046-00-U |                 |                 |          |   |
| L950047-00-U |                 |                 |          |   |
| L950048-00-U |                 |                 |          |   |
| L950049-00-U |                 |                 |          |   |
| L950050-00-U |                 |                 |          |   |
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| L950064-00-U |                 |                 |          |   |
| L950065-00-U |                 |                 |          |   |
| L950066-00-U |                 |                 |          |   |
| L950067-00-U |                 |                 |          |   |
| L950068-00-U |                 |                 |          |   |
| L950069-00-U |                 |                 |          |   |
| L950070-00-U |                 |                 |          |   |
| L950071-00-U |                 |                 |          |   |
| L950072-00-U |                 |                 |          |   |
| L950073-00-U | Alex Abramovici |                 | 2/2/95   | Etalon for Spectra Physics laser  |
| L950074-00-U | Gary Sanders    |                 | 2/2/95   | Transmittal of draft LIGO Project Management Plan to NSF  |
| L950075-00-U | Gary Sanders    |                 | 2/2/95   | Transmittal of draft LIGO Project Management Plan   |
| L950076-00-U |                 |                 |          |   |
| L950077-00-U | Robbie Vogt     |                 | 2/3/95   | Revised Guidelines for Detector Construction Activities   |
| L950078-00-U | Stan Whitcomb   |                 | 2/3/95   | Draft Project Control Meeting Minutes for February 1, 1995  |
| L950079-00-U |                 |                 |          | ADMINISTRATIVE CONFIDENTIAL   |
| L950080-00-U |                 |                 |          | ADMINISTRATIVE CONFIDENTIAL   |
| L950081-00-P | Karen Dowd      |                 | 2/6/95   | FORM LETTER for RFP #KD 203   |
| L950082-00-U |                 |                 |          |   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-----------------|-----------------|---------|---|
| L950083-00-U |                 |                 |         |   |
| L950084-00-U |                 |                 |         |   |
| L950085-00-U | Gerry Stapfer   |                 | 1/17/95 | A-E Design Cost   |
| L950086-00-U | Gerry Stapfer   |                 | 2/6/95  | Review Schedules  |
| L950087-00-U | A. Martin       |                 | 2/6/95  | Reassigned Document Control Number  |
| L950088-00-U | A. Martin       |                 | 2/6/95  | Reassigned Document Control Number  |
| L950089-00-U | A. Martin       |                 | 2/6/95  | Reassigned Document Control Number  |
| L950090-00-U | Stan Whitcomb   |                 | 1/17/95 | Recommendation from the Workshop on Baffling  |
| L950091-00-U | Phil Lindquist  |                 | 2/6/95  | Comments on the Cost Estimate   |
| L950092-00-U |                 |                 |         |   |
| L950093-00-U |                 |                 |         |   |
| L950094-00-U |                 |                 |         |   |
| L950095-00-U |                 |                 |         |   |
| L950096-00-U |                 |                 |         |   |
| L950097-00-U |                 |                 |         |   |
| L950098-00-U |                 |                 |         |   |
| L950099-00-U |                 |                 |         |   |
| L950100-00-U |                 |                 |         |   |
| L950101-00-U |                 |                 |         |   |
| L950102-00-U |                 |                 |         |   |
| L950103-00-U |                 |                 |         |   |
| L950104-00-U |                 |                 |         |   |
| L950105-00-U |                 |                 |         |   |
| L950106-00-U |                 |                 |         |   |
| L950107-00-U | Stan Whitcomb   |                 | 2/7/95  | Agenda for Science Meeting of February 10, 1995   |
| L950108-00-I | A. Kuhnert      |                 | 2/7/95  | Monitoring of Slow Signals in the 40M Interferometer  |
| L950109-00-P | Irena Petrac    |                 | 2/9/95  | Copies of LIGO Solicitations, KD 201 and KD 203   |
| L950110-00-A | Irena Petrac    |                 | 2/9/95  | Information submitted to JPL in support of retaining Linda Turner's services  |
| L950111-00-P | Fred Asiri      |                 | 2/10/95 | Transmittal of KD 203   |
| L950112-00-P | Irena Petrac    |                 | 2/10/95 | Transmittal of KD 203   |
| L950113-00-U | R. Pool         |                 | 1/27/95 | Tax issues re. LIGO Project   |
| L950114-00-U | R. Pool         |                 | 1/31/95 | Tax issues re. LIGO Project   |
| L950115-00-U | R. Pool         |                 | 2/7/95  | Follow-up letter re. tax issues of LIGO Project   |
| L950116-00-U | Gerry Stapfer   |                 | 2/10/95 | Procurement Schedule  |
| L950117-00-U | Gerry Stapfer   |                 | 2/13/95 | Hiring Issues   |
| L950118-00-U | Gary Sanders    |                 | 2/28/95 | Reply to your memo of February 13 re Secretarial Support, Procurement Scheduling, Office Space (AMENDED) and Addendum dated 3 |
| L950119-00-P | Irena Petrac    |                 | 2/14/95 | Transmittal of information copy of RFP #KD 203  |
| L950120-00-P | Irena Petrac    |                 | 2/14/95 | Transmittal of RFP #KD 203  |
| L950121-00-U | Rick Savage     |                 | 2/14/95 | Personnel Assignments to the Core Optics Components Task  |
| L950122-00-V | Alex Abramovici |                 | 2/14/95 | Action Item R14, Vacuum Equipment Review  |
| L950123-00-U |                 |                 |         |   |
| L950124-00-P | Irena Petrac    |                 | 2/15/95 | Consulting Services Agreement, DRAFT  |
| L950125-00-U | Irena Petrac    |                 | 2/15/95 | Transmittal of RFP #KD 203  |
| L950126-00-U |                 |                 |         |   |
| L950127-00-U |                 |                 |         |   |
| L950128-00-U | Gerry Stapfer   |                 | 2/15/95 | LIGO Coordinate System  |
| L950129-00-M | Barry Barish    |                 | 2/15/95 | Transmittal of MIT/CIT Memorandum of Understanding (MOU)  |
| L950130-00-U | Linda Turner    |                 | 1/1/95  | Change in Address   |
| L950131-00-U | Stan Whitcomb   |                 | 2/16/95 | Manuscript for Optics Letters   |
| L950132-00-U | Linda Turner    |                 | 2/15/95 | Contractual Deliverables and Need for Camera Ready Copy   |
| L950133-00-U | Irena Petrac    |                 | 2/16/95 | Transmittal of RFP #KD 203  |
| L950134-00-U | Larry Jones     |                 | 2/16/95 | Parson's request for a candidate design for the beam tube enclosure   |
| L950135-00-U | Stan Whitcomb   |                 | 2/16/95 | Abstract for OPN article on LIGO  |
| L950136-00-U | Stan Whitcomb   |                 | 2/16/95 | Application for participation in the Grant Assistance Program of the International Science Foundation                         |
| L950137-00-U | Ramin Lalezari  |                 | 2/10/95 | "Nondisclosure Agreement" for review  |
| L950138-00-U | Irena Petrac    |                 |         |   |
| L950139-00-U | Irena Petrac    |                 |         |   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950140-00-U | Irena Petrac            |                 |         |   |
| L950141-00-U | Irena Petrac            |                 |         |   |
| L950142-00-U | Irena Petrac            |                 |         |   |
| L950143-00-U | Irena Petrac            |                 |         |   |
| L950144-00-U | Irena Petrac            |                 |         |   |
| L950145-00-U | Irena Petrac            |                 |         |   |
| L950146-00-U |                         |                 |         |   |
| L950147-00-U |                         |                 |         |   |
| L950148-00-U |                         |                 |         |   |
| L950149-00-U |                         |                 |         |   |
| L950150-00-U |                         |                 |         |   |
| L950151-00-U |                         |                 |         |   |
| L950152-00-U |                         |                 |         |   |
| L950153-00-U |                         |                 |         |   |
| L950154-00-U |                         |                 |         |   |
| L950155-00-U |                         |                 |         |   |
| L950156-00-U | Bill Althouse           |                 | 2/17/95 | Cost Account Allocation, HTES Subcontract   |
| L950157-00-U |                         |                 |         |   |
| L950158-00-P | Phil Lindquist          |                 | 2/17/95 | Minutes of Computer Committee Meeting held 13 February 1995   |
| L950159-00-U | Rick Savage             |                 | 1/20/95 | Request for Assistance from S. Elieson and Y. Kommemi   |
| L950160-00-M | Gary Sanders            |                 | 3/16/95 | Acting Project Manager  |
| L950161-00-C | V. Schmidt              |                 | 2/17/95 | Request for Document Numbers  |
| L950162-00-P | Linda Turner            |                 | 2/16/95 | Weekly Report for week ending 2/17/95   |
| L950163-00-P | Bill Talbott            |                 | 2/15/95 | Final invoice for Selland Construction, Inc.  |
| L950164-00-P | Irena Petrac            |                 | 2/21/95 | Consulting Services Agreement, DRAFT  |
| L950165-00-U | Robbie Vogt             |                 | 2/21/95 | Request for assistance from S. Elieson and Y. Kommemi   |
| L950166-00-U | Albert Lazzarini        |                 | 2/21/95 | Utility of AVS for the LIGO Project   |
| L950167-00-U | Tyler Jackson           |                 | 2/20/95 | Impacts in terms of new criteria and potential scope changes as a result of the Tiger Team meeting                  |
| L950168-00-U | Fred Raab               |                 | 3/8/95  | Description of Processes and Activities in the Operations Support Building  |
| L950169-00-U | Larry Jones             |                 | 2/22/95 | Project Control Meeting Minutes for 22 February 1995  |
| L950170-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950171-00-P | Phil Lindquist          |                 | 2/22/95 | LIGO Project Monthly Progress Report, January 1995  |
| L950172-00-U | Stan Whitcomb           |                 | 2/23/95 | Levels of outgassing allowed for any candidate blackening material  |
| L950173-00-P | Linda Turner            |                 | 2/24/95 | LIGO Document Number Changes  |
| L950174-00-U | D. Lindeman             |                 | 2/23/95 | Receipt of application to ISF's Grant Assistance Program  |
| L950175-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950176-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950177-00-P | Linda Turner            |                 | 2/27/95 | Weekly Report for Week ending 2/24/95   |
| L950178-00-U | Gary Sanders            |                 | 2/28/95 | Invitation to serve as chair for the source selection board - Vacuum Equipment Design Contract                      |
| L950179-00-U | Stan Whitcomb           |                 | 2/27/95 | Interferometer Photograph and Caption   |
| L950180-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950181-00-P | Phil Lindquist          |                 | 2/27/95 | Comparison of COBRA database with SUCCESS Cost Estimate   |
| L950182-00-U |                         |                 |         |   |
| L950183-00-P | Phil Lindquist          |                 | 3/1/95  | Cooperative Agreement No. PHY-9210038, Amendment 5  |
| L950184-00-U | R. Pool                 |                 | 2/23/95 | Land sale transaction/lease for Livingston Parish LIGO site; tax issues   |
| L950185-00-U | R. Pool                 |                 | 2/23/95 | Transmittal of correspondence showing retainment of specialized counsel for tax/property competencies for each site |
| L950186-00-U | Earl Friese             |                 | 2/28/95 | Vacuum Equipment Review Panel   |
| L950187-00-U |                         |                 |         |   |
| L950188-00-U | Jay Heefner             |                 | 3/6/95  | Board fabrication specifications  |
| L950189-00-P | Fred Asiri              |                 | 3/1/95  | Project Control Meeting Minutes for 22 February 1995  |
| L950190-00-P | Linda Turner            |                 | 3/6/95  | Weekly Report - Week Ending 3 March 1995  |
| L950191-00-M | Gary Sanders            |                 | 3/6/95  | ADMINISTRATIVE CONFIDENTIAL   |
| L950192-00-M | Gary Sanders            |                 | 3/6/95  | ADMINISTRATIVE CONFIDENTIAL   |
| L950193-00-M | Gary Sanders            |                 | 3/6/95  | ADMINISTRATIVE CONFIDENTIAL   |
| L950194-00-M | Gary Sanders            |                 | 3/6/95  | ADMINISTRATIVE CONFIDENTIAL   |
| L950195-00-M | Tyler Jackson           |                 | 2/2/95  | LIGO Tax Planning Ideas   |
| L950196-00-M | Gary Sanders            |                 | 3/7/95  | Follow-Up to meeting of March 6   |



| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950197-00-I | Albert Lazzarini        |                 | 3/7/95  | Baseline Interferometer Configuration Decisions of 14 February Detector Meeting                                 |
| L950198-00-U | Albert Lazzarini        |                 | 3/7/95  | Integration Meeting Minutes of 9 February 1995  |
| L950199-00-U | Stan Whitcomb           |                 | 3/8/95  | Search/Affirmative Action Report for LIGO Scientific Staff Positions - ADMINISTRATIVE CONFIDENTIAL              |
| L950200-00-U | David Shoemaker         |                 | 3/8/95  | Summary of Science Meeting of 10 February 1995  |
| L950201-00-U | Jay Heefner             |                 | 3/9/95  | Request for budgetary quote for design and fabrication of circuit boards  |
| L950202-00-U | Syd Meshkov             |                 | 3/10/95 | Project Control Meeting Minutes for 8 March 1995  |
| L950203-00-P | Phil Lindquist          |                 | 3/9/95  | Submittals for the Quarterly Report (LIGO-M940001-00-P, LIGO-M950003-00-P)                                      |
| L950204-00-P | Phil Lindquist          |                 | 3/10/95 | Integrated Project Schedule Review Meeting of 9 March 1995 - Action Assignments                                 |
| L950205-00-P | Phil Lindquist          |                 | 3/10/95 | Data Control Database Requirements Specifications   |
| L950206-00-U | Robbie Vogt             |                 | 3/8/95  | COC Pathfinder Polishing Proposal (#KD 201) Evaluation Committee  |
| L950207-00-P | Phil Lindquist          |                 | 3/13/95 | System Requirements for LIGO Project Document Control Tracking  |
| L950207-01-P | Phil Lindquist          |                 | 3/13/95 | System Requirements for LIGO Project Document Control Tracking  |
| L950207-02-P | Phil Lindquist          |                 | 3/13/95 | System Requirements for LIGO Project Document Control Tracking  |
| L950208-00-V | Earl Friese             |                 | 3/13/95 | Support documentation dealing with the procurement and selection of the LIGO Vacuum Equipment                   |
| L950209-00-M | Albert Lazzarini        |                 | 3/13/95 | Use of Metric Units on the LIGO Project   |
| L950210-00-I | Albert Lazzarini        |                 | 3/13/95 | Description of the Orientation of the LIGO Interferometer Planes Relative to the Surface of the Earth           |
| L950211-00-U | Gerry Stapfer           |                 | 3/13/95 | Vacuum Equipment Review Panel Report of 7 March 1995 Meeting  |
| L950212-00-U | Linda Turner            |                 | 3/14/95 | Status of CIT review on Project Control Plan and Construction Management Plan                                   |
| L950213-00-U |                         |                 |         |   |
| L950214-00-U |                         |                 |         |   |
| L950215-00-U | Albert Lazzarini        |                 | 1/19/95 | Integration Meeting Agenda for 9 February 1995  |
| L950216-00-P | Gary Sanders            |                 | 1/31/95 | Project Control Meeting Agenda for 1 February 1995  |
| L950217-00-O | Sven Svendsen           |                 | 1/11/95 | Pros and Cons discussion of Aura Systems Inc. Vibration Control in Structures                                   |
| L950218-00-U | Rick Savage             |                 | 3/15/95 | Core Optics Pathfinder Metrology  |
| L950219-00-U | Stan Whitcomb           |                 | 3/20/95 | Manuscript submission form and copyright transfer agreement (for manuscript LIGO-P950001-00-R)                  |
| L950220-00-M | Gary Sanders            |                 | 3/16/95 | Acting Project Manager  |
| L950221-00-U | Albert Lazzarini        |                 | 3/16/95 | Descriptive materials outlining AVS and its applications  |
| L950222-00-D | Bill Althouse           |                 | 3/16/95 | PSL Design Requirements Review Report   |
| L950223-00-U | Robbie Vogt             |                 | 3/14/95 | Appointment of Senior Research Fellow - Norbert Solomonson ADMINISTRATIVE CONFIDENTIAL                          |
| L950224-00-D | Robbie Vogt             |                 | 3/16/95 | Detector Quarterly Report Input - Period December 1, 1994 through March 28, 1995                                |
| L950225-00-U | Irena Petrac            |                 | 3/16/95 | Information for Evaluation Committee for the LIGO Optics Polishing Technology Demonstration and Evaluation Form |
| L950226-00-B | Larry Jones             |                 | 3/17/95 | Beam Tube Quarterly Report - Period ending 2/28/95  |
| L950226-01-B | Larry Jones             |                 | 3/17/95 | Beam Tube Quarterly Report - Period ending 2/28/95  |
| L950227-00-U | Syd Meshkov             |                 | 3/15/95 | Project Control Meeting Minutes for 15 March 1995   |
| L950228-00-U | Stan Whitcomb           |                 | 3/20/95 | Transmitting reprint of artist's drawing of the LIGO landscape painting to IEEE Spectrum                        |
| L950229-00-U |                         |                 |         |   |
| L950230-00-U |                         |                 |         |   |
| L950231-00-U |                         |                 |         |   |
| L950232-00-M | Karen Sandberg          |                 | 3/21/95 | Executed Lease Option for Louisiana   |
| L950233-00-C | V. Schmidt              |                 | 3/21/95 | Cabling for BT Baking and Leak Testing  |
| L950234-00-U | Jay Heefner             |                 | 3/22/95 | Schematics, parts lists and relevant data sheets for circuit boards to be fabricated under P.O. #PP162128-75JH  |
| L950235-00-P | Phil Lindquist          |                 | 3/23/95 | Subcontracts Status Report  |
| L950236-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950237-00-P | Irena Petrac            |                 | 3/23/95 | Paperwork for Contract #PC 119673   |
| L950238-00-O | Albert Lazzarini        |                 | 4/12/95 | Vibrational and Acoustic Requirements for the LIGO Facilities   |
| L950239-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950240-00-C | Jay Heefner             |                 | 3/23/95 | Request for budgetary quote for design and fabrication of circuits board  |
| L950241-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950242-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950243-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950244-00-U | I. Baldon               |                 | 3/27/95 | Request for Official Approval of Foreign Travel - NSF Grant PHY-9210038, Acct. #5N501                           |
| L950245-00-U | Robbie Vogt             |                 | 3/27/95 | PSL DRR Action Items Assignments  |
| L950246-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L95024700M   | Barry Barish            |                 | 3/29/95 | Held in Gary Sanders' office - ADMINISTRATIVE CONFIDENTIAL  |
| L950248-00-U | Stan Whitcomb           |                 | 3/28/95 | Updated budget for the Moscos State University (MSU) portion of Proposal PHY-9503642                            |
| L950249-00-P | Phil Lindquist          |                 | 3/28/95 | Review Request for LIGO Monthly Report - DRAFT (LIGO-M950012-00-P)  |
| L950250-00-B | Gerry Stapfer           |                 | 3/28/95 | LIGO Beam Tube Qualification Test Review, April 17-18, 1995   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950251-00-U | Gary Sanders            |                 | 3/29/95 | Invitation to Observe Beam Tube Qualification Test of April 17-18, 1995   |
| L950252-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950253-00-O | Rai Weiss               |                 | 3/28/95 | Beam Tube Enclosure Meeting Summary held 27 March 1995  |
| L950254-00-U | Albert Lazzarini        |                 | 3/29/95 | Facilities Interface Definitions: BT/VE/Civil   |
| L950255-00-U | Larry Jones             |                 | 3/29/95 | Change of Personnel - Caltech Purchasing  |
| L950256-00-P | Phil Lindquist          |                 | 3/30/95 | LIGO Project Quarterly Report, 1st Quarter, FINAL   |
| L950257-00-P | Phil Lindquist          |                 | 3/31/95 | Allocation of Actual Costs to 'Work Packages'   |
| L950258-00-O | Fred Asiri              |                 | 3/30/95 | Request for manhours budgeted for all the trade studies portion of the LIGO Phase A                                 |
| L950259-00-P | Irena Petrac            |                 | 3/30/95 | Change Order #2 to DOE P.O. for infrastructure services as part of the DOE's involvement in the LIGO construction   |
| L950260-00-U | Stan Whitcomb           |                 | 3/30/95 | Additional information for distribution of funds in Moscow  |
| L950261-00-P | Phil Lindquist          |                 | 3/31/95 | Actual Cost Allocation by Account Code  |
| L950262-00-M | Barry Barish            |                 | 3/31/95 | Conference Talks/Attendance   |
| L950263-00-V | Gerry Stapfer           |                 | 3/31/95 | Actions required for the Vacuum Equipment Contract  |
| L950264-00-D | Stan Whitcomb           |                 | 3/31/95 | Transmittal of manuscript and figures for "The LIGO", LIGO-P950002-00-R   |
| L950265-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950266-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950267-00-U | Needs to be reassigned  |                 |         |   |
| L950268-00-U | McMaster-Carr Supp. Co. |                 |         | ADMINISTRATIVE CONFIDENTIAL   |
| L950269-00-U | Rick Savage             |                 | 2/3/95  | Core Optics Components FY 95 Statement of Work  |
| L950270-00-I | P. Smith                |                 | 3/23/95 | Receipt of Manuscript (LIGO-P950001-00-R)   |
| L950271-00-P | Syd Meshkov             |                 | 4/3/95  | Project Control Meeting Minutes for 29 March 1995   |
| L950272-00-U | Jay Heefner             |                 | 4/4/95  | Request for budgetary quote for design and fabrication of circuit boards  |
| L950273-00-U | Jay Heefner             |                 | 4/5/95  | Schematics for circuit boards   |
| L950274-00-P | Phil Lindquist          |                 | 4/5/95  | Minutes of Computer Committee Meeting for 27 March 1995   |
| L950275-00-P | Larry Jones             |                 | 4/6/95  | Change of Addressee for Contract Documents  |
| L950276-00-U | Gary Sanders            |                 |         | ADMINISTRATIVE CONFIDENTIAL   |
| L950277-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950278-00-D | Mike T. Gamble          |                 | 4/7/95  | Detector Meeting Foundation Study Action Item Response  |
| L950279-00-B | Larry Jones             |                 | 4/7/95  | Technical Direction Memorandum (TDM) Signatures   |
| L950280-00-U | Earl Friese             |                 | 4/7/95  | Preliminary agenda for QTR for LIGO Beam Tube held on 17-18 April 1995  |
| L950281-00-U | Patricia Greer          |                 | 3/17/95 | Renewal proposal for LIGO, P.O. #PP045667   |
| L950282-00-O | Dr. David Berley        |                 | 3/17/95 | Finding of No Significant Impact (FONSI) for LIGO on LSU Site, Livingston, LA                                       |
| L950283-00-P | Syd Meshkov             |                 | 4/11/95 | Project Control Meeting Minutes for 5 April 1995  |
| L950284-00-U | Albert Lazzarini        |                 | 4/9/95  | Response to Report on LIGO Baffle Material Search   |
| L950285-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950286-00-F | Gerry Stapfer           |                 | 4/12/95 | Updated Review Schedule for A-E activities  |
| L950287-00-V | John Worden             |                 | 4/13/95 | Contracting Plan for the Vacuum Equipment Control System  |
| L950288-00-U | Robbie Vogt             |                 | 4/13/95 | Core Optics Components FY95 Statement of Work   |
| L950289-00-O | Fred Asiri              |                 | 4/13/95 | Transmittal of LIGO-L950282-00-O (FONSI)  |
| L950290-00-B | Larry Jones             |                 | 4/13/95 | Updates Required for the Final Version of the Beam Tube Detailed Design Package (CBI CDRL #10)                      |
| L950291-00-P | Syd Meshkov             |                 | 4/17/95 | Project Control Meeting Minutes for 12 April 1995   |
| L950292-00-P | Phil Lindquist          |                 | 4/17/95 | Allocation of Labor Costs   |
| L950293-00-P | Phil Lindquist          |                 | 4/17/95 | Change Requests 001, 002, 003 and 004 for information   |
| L950294-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950295-00-R | Stan Whitcomb           |                 | 4/18/95 | Correspondence with ISF concerning transfer of funds to Vladimir Braginsky and his group at Moscow State University |
| L950296-00-P | Phil Lindquist          |                 | 4/19/95 | Computer Committee Meeting Minutes for 10 April 1995  |
| L950297-00-P | Phil Lindquist          |                 | 4/18/95 | R&D Performance Measurement Baseline  |
| L950298-00-U | Phil Lindquist          |                 | 4/19/95 | Caltech Identification fro Thomas Nguyen  |
| L950299-00-U |                         |                 |         |   |
| L950300-00-R | D. Lindeman             |                 | 4/11/95 | ISF Grant Assistance Program approval to assist CIT in transfer of funds/equipment to Moscow State University       |
| L950301-00-R | D. Lindeman             |                 | 2/23/95 | Confirmation of receipt of application to ISF Grant Assistance Program  |
| L950302-00-U | D. Lindeman             |                 |         | ISF Grant Assistance Program approval to assist CIT in transfer of funds/equipment to Moscow State University       |
| L950303-00-U |                         |                 |         |   |
| L950304-00-U | Stan Whitcomb           |                 | 4/20/95 | MSU subcontract acceptance letter   |
| L950305-00-V | John Worden             |                 | 4/21/95 | Contracting Plan for the Vacuum Equipment Control System  |
| L950306-00-U |                         |                 |         |   |
| L950307-00-P | Linda Turner            |                 | 4/21/95 | Signed Contract #PP161533 for CIT signature and handling  |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950308-00-P | Phil Lindquist          |                 | 4/24/95 | Distribution of Monthly Progress Report, March 1995 - DRAFT                               |
| L950309-00-B | Bill Althouse           |                 | 4/24/95 | Beam Tube Qualification Test Review Viewgraphs  |
| L950310-00-P | Phil Lindquist          |                 | 4/24/95 | Change Requests CR-950005, CR-950006  |
| L950311-00-P | Phil Lindquist          |                 | 4/24/95 | Project Office Performance Measurement Baseline and Proposed Changes                      |
| L950312-00-U |                         |                 |         |   |
| L950313-00-U | Stan Whitcomb           |                 | 4/24/95 | Change of Account Number on V. Braginsky's Pan Form                                       |
| L950314-00-U |                         |                 |         |   |
| L950315-00-F |                         |                 | 2/1/95  | Assessment Report and Right of Way Exhibits for Livingston, LA                            |
| L950316-00-P | Phil Lindquist          |                 | 4/25/95 | Transmittal of Monthly Progress Report, MARCH 1995  |
| L950317-00-P | Phil Lindquist          |                 | 4/25/95 | Assessment of Status of Finance Records   |
| L950318-00-U |                         |                 |         |   |
| L950319-00-B | Gerry Stapfer           |                 | 4/27/95 | Draft QTR Report  |
| L950320-00-U | Stan Whitcomb           |                 | 4/27/95 | Mode Cleaner Performance Review, 21 April 1995  |
| L950321-00-C | Jay Heefner             |                 | 4/27/95 | Schematics for circuit board fabrication under P.O. PP164617-75JH                         |
| L950322-00-P | Phil Lindquist          |                 | 4/28/95 | CCB meeting to review CR-0001 and CR-005B   |
| L950323-00-P | Syd Meshkov             |                 | 5/1/95  | Project Control Meeting Minutes for 26 April 1995   |
| L950324-00-P | Linda Turner            |                 | 4/28/95 | Handling of Engineering Drawings  |
| L950325-00-U | Rick Savage             |                 | 5/1/95  | Core Optics Components FY95 Statement of Work   |
| L950326-00-U |                         |                 |         |   |
| L950327-00-U | Doug Jungwirth          |                 | 5/3/95  | Tasks related to developing optical layout and subcontract to Optical Research Associates |
| L950328-00-U | J. Stone                |                 | 4/25/95 | Reviewer's comments for manuscript publication  |
| L950329-00-P | Gary Sanders            |                 | 5/2/95  | Retroactive Transfer of Salary Changes  |
| L950330-00-M | Barry Barish            |                 | 5/5/95  | REU Supplemental Request for LIGO   |
| L950331-00-M | Gary Sanders            |                 | 5/5/95  | Advance copy of REU Supplemental Request for LIGO (LIGO-L950330-00-M)                     |
| L950332-00-P | Phil Lindquist          |                 | 5/5/95  | Change Requests CR-950007, CR-950008  |
| L950333-00-U |                         |                 |         |   |
| L950334-00-P | Phil Lindquist          |                 | 5/5/95  | LIGO Change Control Board Meeting Minutes for 1 May 1995                                  |
| L950335-00-U |                         |                 |         |   |
| L950336-00-U | Bill Althouse           |                 | 5/8/95  | ASC System DRR on 11 May 1995   |
| L950337-00-D | Jordan Camp             |                 | 5/5/95  | Disposition of Action Items from PSL DRR  |
| L950338-00-P | Phil Lindquist          |                 | 5/8/95  | Solicitation of Comments for Draft Work Breakdown Structure Dictionary                    |
| L950339-00-U |                         |                 |         |   |
| L950340-00-O | Fred Asiri              |                 | 5/8/95  | Livingston, LA Pipeline Crossing - Option1/Option 2                                       |
| L950341-00-O | Fred Asiri              |                 | 5/8/95  | Livingston, LA Pipeline Crossing - Option1/Option 2                                       |
| L950342-00-P | Syd Meshkov             |                 | 5/8/95  | Project Control Meeting Minutes for 4 May 1995  |
| L950343-00-U | Cindy Akutagawa         |                 | 5/9/95  | Termination of Aaron Gillespie  |
| L950344-00-P | Phil Lindquist          |                 | 5/9/95  | Requests for Input to Quarterly Report  |
| L950345-00-P | Phil Lindquist          |                 | 5/10/95 | Change Request CR-950006, Rev. A  |
| L950346-00-U |                         |                 |         |   |
| L950347-00-P | Phil Lindquist          |                 | 5/10/95 | LIGO Change Control Board Meeting scheduled for 15 May 1995                               |
| L950348-00-U |                         |                 |         |   |
| L950349-00-M | Gary Sanders            |                 | 5/12/95 | NSF Review Data Package for 22-24 May 1995  |
| L950350-00-P | Phil Lindquist          |                 | 5/12/95 | Change Request CR-9500010, FY 1994 Actual Cost Allocation                                 |
| L950351-00-U |                         |                 |         |   |
| L950352-00-U |                         |                 |         |   |
| L950353-00-U | Albert Lazzarini        |                 | 5/15/95 | Future advice and expertise for dynamic wind disturbances in LIGO                         |
| L950354-00-U | K. Thorne               |                 | 4/2/95  | Distribution of Technical Report (LIGO-T950033)   |
| L950355-00-B | Larry Jones             |                 | 5/16/95 | Review of Beam Tube Specimen Contract   |
| L950356-00-R | J. Richardson           |                 | 5/11/95 | Receipt of final version of manuscript  |
| L950357-00-I | Rick Savage             |                 | 5/16/95 | REO System Requirements Review  |
| L950358-00-A | Beth Moore              |                 | 5/12/95 | Otto Matherney - Relocation   |
| L950359-00-M | Lew Allen               |                 | 5/12/95 | LIGO Oversight Committee Meeting Minutes, 14 April 1995                                   |
| L950360-00-P | Linda Turner            |                 | 5/17/95 | New Form - RFP Checklist, DRAFT   |
| L950361-00-R | S. Grinnan              |                 | 5/16/95 | Galley of article for July issue of OPN   |
| L950362-00-U |                         |                 |         |   |
| L950363-00-P | Phil Lindquist          |                 | 5/19/95 | Subcontract Management Responsibility Assignments   |
| L950364-00-U | McMaster-Carr Supp. Co. |                 |         |   |

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|--------------|-------------------------|-----------------|---------|--|
| L950365-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950366-00-D | Robbie Vogt             |                 | 5/19/95 | REO Systems Requirement Review   |
| L950367-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950368-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950369-00-D | Stan Whitcomb           |                 | 5/19/95 | Search/Affirmative Action Report for LIGO Scientific Staff Positions - Administrative Confidential |
| L950370-00-D | Robbie Vogt             |                 | 5/19/95 | SUS System Design Requirements Review (DRR)  |
| L950371-00-D | Robbie Vogt             |                 | 5/19/95 | PSL PDR on 5 June 1995   |
| L950372-00-P | Phil Lindquist          |                 | 5/20/95 | LIGO Change Control Board Meeting Minutes for 1 May 1995   |
| L950373-00-I | Rick Savage             |                 | 5/22/95 | COC Input to Quarterly Report  |
| L950374-00-D | Robbie Vogt             |                 | 5/22/95 | Appointment of Senior Research Fellow - Administrative Confidential                                |
| L950375-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950376-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950377-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950378-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950379-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950380-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950381-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950382-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950383-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950384-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950385-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950386-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950387-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950388-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950389-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950390-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950391-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950392-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950393-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950394-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950395-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950396-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950397-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950398-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950399-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950400-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950401-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950402-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950403-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950404-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950405-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950406-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950407-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950408-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950409-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950410-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950411-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950412-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950413-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950414-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950415-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950416-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950417-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950418-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950419-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950420-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |
| L950421-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|-------------------------|-----------------|---------|--|
| L950422-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950423-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950424-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950425-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950426-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950427-00-R | Stan Whitcomb           |                 | 5/24/95 | Notice of unaccepted application for LIGO staff position                         |
| L950428-00-U |                         |                 |         |  |
| L950429-00-U |                         |                 |         |  |
| L950430-00-U |                         |                 |         |  |
| L950431-00-U |                         |                 |         |  |
| L950432-00-U |                         |                 |         |  |
| L950433-00-U |                         |                 |         |  |
| L950434-00-U |                         |                 |         |  |
| L950435-00-U |                         |                 |         |  |
| L950436-00-U |                         |                 |         |  |
| L950437-00-U |                         |                 |         |  |
| L950438-00-U |                         |                 |         |  |
| L950439-00-U |                         |                 |         |  |
| L950440-00-U |                         |                 |         |  |
| L950441-00-U |                         |                 |         |  |
| L950442-00-U |                         |                 |         |  |
| L950443-00-U |                         |                 |         |  |
| L950444-00-U |                         |                 |         |  |
| L950445-00-U |                         |                 |         |  |
| L950446-00-U |                         |                 |         |  |
| L950447-00-U |                         |                 |         |  |
| L950448-00-U |                         |                 |         |  |
| L950449-00-P | Linda Turner            |                 | 5/25/95 | Computer Integrated Engineering Implementation Plan from Parsons                 |
| L950450-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950451-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950452-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950453-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950454-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950454-00-V | Gary Sanders            |                 | 7/14/95 | Announcement of Vacuum Equipment Source Selection Board Meeting, 7/28/95         |
| L950455-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950456-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950457-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950458-00-P | Phil Lindquist          |                 | 5/25/95 | Distribution of MIT Costs Invoiced for February and March 1995                   |
| L950459-00-O | Linda Turner            |                 | 5/25/95 | Distribution of Computer Integrated Engineering Implementation Plan from Parsons |
| L950460-00-M | Gary Sanders            |                 | 5/24/95 | Our review meeting of May 16 and related matters - Administrative Confidential   |
| L950461-00-D | Bill Althouse           |                 | 5/25/95 | Prestabilized Laser Preliminary Design Review (PDR)                              |
| L950462-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950463-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950464-00-D | Jordan Camp             |                 | 5/23/95 | Summary of discussion of Argon ion laser vendor choice                           |
| L950465-00-D | Bill Althouse           |                 | 5/26/95 | Prestabilized Laser Preliminary Design Review (PDR)                              |
| L950466-00-P | Phil Lindquist          |                 | 5/26/95 | LIGO Change Control Board Meeting Scheduled for 31 May 1995                      |
| L950467-00-D | Bill Althouse           |                 | 5/26/95 | Suspension Subsystem Design Requirements Review                                  |
| L950468-00-M | Syd Meshkov             |                 | 5/30/95 | Project Control Meeting Minutes, 24 May 1995                                     |
| L950469-00-D | Bill Althouse           |                 | 5/31/95 | Activity Status Report   |
| L950470-00-V | John Worden             |                 | 6/1/95  | Backup Sheets for CR-950007 and CR-950008  |
| L950471-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950472-00-P | Phil Lindquist          |                 | 5/20/95 | LIGO Change Control Board Meeting Minutes, 31 May 1995                           |
| L950473-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950474-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950475-00-P | Phil Lindquist          |                 | 6/5/95  | Transmittal of LIGO Project Monthly Progress Report for April 1995               |
| L950475-01-P | Phil Lindquist          |                 | 8/2/95  | Revised Procedure for Labor Reporting  |
| L950476-00-P | Phil Lindquist          |                 | 6/5/95  | End of April Allocation of Actual Costs  |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950477-00-M | Beth Moore              |                 | 6/2/95  | Otto Matherney - Relocation with North American Van Lines   |
| L950478-00-M | Earl Friese             |                 | 6/6/95  | Transmittal of MOU between CaRT and LIGO (LIGO-M950019-00-M)  |
| L950479-00-M | Earl Friese             |                 | 6/6/95  | Transmittal of MOU between CaRT and LIGO (LIGO-M950019-00-M)  |
| L950480-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950481-00-D | Bill Althouse           |                 | 6/6/95  | Quarterly Report Input from Detector Group  |
| L950482-00-B | Larry Jones             |                 | 6/7/95  | Quarterly Report Input for Beam Tube, period ending 5/31/95   |
| L950483-00-P | Phil Lindquist          |                 | 6/7/95  | Allocation of Actual Costs - Detail Reports   |
| L950484-00-P | Phil Lindquist          |                 | 6/7/95  | NSF Proposal Materials Concerning Dr. K. Sliwa  |
| L950485-00-P | Phil Lindquist          |                 | 6/8/95  | Distribution of MIT Costs Invoiced for April 1995   |
| L950486-00-P | Linda Turner            |                 | 6/9/95  | Room 51 Floor Plan and Proposed Cabinet   |
| L950487-00-P | Phil Lindquist          |                 | 6/13/95 | Cost/Schedule Control Systems Reporting Calendar  |
| L950488-00-M | Gary Sanders            |                 | 6/9/95  | Justification for Purchase of High-Volume Copy Machine  |
| L950489-00-P | Syd Meshkov             |                 | 6/12/95 | Project Control Meeting Minutes, 7 June 1995  |
| L950490-00-V | John Worden             |                 | 6/12/95 | Vacuum Equipment Evaluation Review Panel Meeting, 21 July 1995  |
| L950490-02-E | Irena Petrac            |                 | 4/22/96 | Change Order Number 2 for P.O. PP167159   |
| L950491-00-U |                         |                 |         |   |
| L950491-00-V | John Worden             |                 | 6/12/95 |   |
| L950492-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950493-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950494-00-R | Seiji Kawamura          |                 | 6/14/95 | Electronics and Cables of the 40m Suspension  |
| L950495-00-P | Phil Lindquist          |                 | 6/15/95 | Allocation of Actual Costs - Detail Reports, End of May 1995  |
| L950496-00-R | Stan Whitcomb           |                 | 6/15/95 | Completed forms "Additional Information: Purchase of Material" for equipment to be purchased for V. Braginsky at Moscow State |
| L950497-00-D | Lisa Sievers            |                 | 6/15/95 | Transmittal of LIGO-T950038-00-R  |
| L950498-00-M | Barry Barish            |                 | 6/15/95 |   |
| L950498-00-U |                         |                 |         |   |
| L950499-00-M | I. Baldon               |                 | 6/15/95 | Change in A/C Number  |
| L950500-00-M | Gary Sanders            |                 | 6/16/95 | Invitation to Vacuum Equipment Preliminary Design Reviews   |
| L950501-00-V | John Worden             |                 | 6/16/95 | Vacuum Equipment Preliminary Design Reviews, 26-27 June 1995  |
| L950502-00-P | Syd Meshkov             |                 | 6/19/95 |   |
| L950503-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950504-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950505-00-A | I. Baldon               |                 | 6/20/95 |   |
| L950506-00-U | McMaster-Carr Supp. Co. |                 | 6/20/95 |   |
| L950507-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950508-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950509-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950510-00-R | Stan Whitcomb           |                 | 6/22/95 |   |
| L950511-00-M | Barry Barish            |                 | 6/22/95 |   |
| L950512-00-P | Syd Meshkov             |                 | 6/26/95 |   |
| L950513-00-O | Rick Savage             |                 | 6/22/95 | Civil Construction Requirements Definition Process  |
| L950514-00-M | Phil Lindquist          |                 | 6/23/95 | Transmittal of Quarterly Progress Report, 2nd Quarter 1995  |
| L950515-00-R | Stan Whitcomb           |                 | 6/23/95 |   |
| L950516-00-M | Barry Barish            |                 | 6/23/95 |   |
| L950517-00-M | Barry Barish            |                 | 6/23/95 |   |
| L950518-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950519-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950520-00-U | McMaster-Carr Supp. Co. |                 |         |   |
| L950521-00-M | Gary Sanders            |                 | 6/9/95  |   |
| L950522-00-D | Bill Althouse           |                 | 6/27/95 |   |
| L950523-00-U | McMaster-Carr Supp. Co. |                 | 6/28/95 |   |
| L950524-00-V | John Worden             |                 | 6/29/95 | Vacuum Equipment Evaluation Committee Meeting for 5 July 1995   |
| L950525-00-P | Syd Meshkov             |                 | 6/30/95 |   |
| L950526-00-M | Gary Sanders            |                 | 6/16/95 |   |
| L950527-00-P | Phil Lindquist          |                 | 6/19/95 |   |
| L950528-00-M | Gary Sanders            |                 | 6/20/95 |   |
| L950529-00-V | Gerry Stapfer           |                 | 6/30/95 |   |
| L950530-00-P | Linda Turner            |                 | 6/16/95 |   |

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|--------------|-------------------------|-----------------|---------|--|
| L950531-00-M | McMaster-Carr Supp. Co. |                 | 5/23/95 |  |
| L950532-00-M | Earl Friese             |                 | 5/31/95 |  |
| L950533-00-M | Sandy Pool              |                 | 5/30/95 | LIGO Project - State Tax Issues, Washington                                |
| L950534-00-M | Sandy Pool              |                 | 5/30/95 | LIGO Project State Tax Issues, Louisiana                                   |
| L950535-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950536-00-D | Steve Elieson           |                 | 5/22/95 | Pathfinder Optics shipping Container Statement of Work                     |
| L950537-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950538-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950539-00-M | Gary Sanders            |                 | 4/24/96 | Administrative Confidential  |
| L950539-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950540-00-M | Gary Sanders            |                 | 4/24/96 | Administrative Confidential  |
| L950540-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950541-00-R | Irena Petrac            |                 | 7/10/95 | VME System Cost Estimate   |
| L950542-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950543-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950544-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950545-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950546-00-U | Stan Whitcomb           |                 | 7/14/95 | Letter of Recommendation   |
| L950547-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950548-00-U | Stan Whitcomb           |                 | 7/14/95 | Student Volunteer - Uta Weiland  |
| L950549-00-P | Syd Meshkov             |                 | 7/17/95 | Project Control Meeting Minutes for 12 July 1995                           |
| L95054900P   | Syd Meshkov             |                 | 7/24/95 | Project Control Meeting Minutes for 19 July 1995                           |
| L950550-00-U | Phil Lindquist          |                 | 7/14/95 | Allocation of Actual Costs - Detail Reports, June 1995                     |
| L950551-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950552-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950553-00-U | McMaster-Carr Supp. Co. |                 |         |  |
| L950554-00-U | Bill Althouse           |                 | 7/19/95 | Comments on Parsons' Final Concept Design Documents                        |
| L950555-00-F | Gerry Stapfer           |                 | 7/17/95 | Facilities Action Item List  |
| L950556-00-F | Mark Coles              |                 | 7/18/95 | Objection to DOE Selection of Hanford for Interim Plutonium Pit Storage    |
| L950557-00-O | V. Schmidt              |                 | 7/19/95 | Reponse to Parsons 100% Conceptual Design Documentation                    |
| L950558-00-P | Linda Coble             |                 | 7/18/95 | Copy of Approved Invoice   |
| L950559-00-U |                         |                 | 10/2/95 | Missing Document   |
| L950560-00-M | I. Baldon               |                 | 7/19/95 | Confirmation of July 31, 1995 Oversight Committee Meeting                  |
| L950561-00-O | April Burke             |                 | 7/20/95 | Livingston Site Commemoration Photos                                       |
| L950562-00-D | Robbie Vogt             |                 | 7/20/95 | Business Introduction  |
| L950563-00-U |                         |                 | 10/2/95 | Missing document   |
| L950564-00-P | Phil Lindquist          |                 | 7/20/95 | Transmittal of Monthly Progress Report, June 1995                          |
| L950565-00-U |                         |                 | 10/2/95 | Missing Document   |
| L950566-00-V | Mike Zucker             |                 | 7/21/95 | Planned Revisions to Vacuum Equipment Specifications                       |
| L950566-00-V | John Worden             |                 | 7/21/95 | Planned Revisions to Vacuum Equipment Specifications                       |
| L950567-00-U |                         |                 | 10/2/95 | Missing Document   |
| L950568-00-B | Larry Jones             |                 | 7/21/95 | Beam Tube Baffle Design Review   |
| L950569-00-D | Garilynn Billingsley    |                 | 7/18/95 | Current Inventory of Large Optics for the Pathfinder Program               |
| L950570-00-U |                         |                 | 10/2/95 | missing document   |
| L950571-00-U |                         |                 | 10/2/95 | missing document   |
| L950572-00-V | Gerry Stapfer           |                 | 7/24/95 | Vacuum Equipment Review Panel Meeting                                      |
| L950573-00-M | Randy Bond              |                 | 7/13/95 | Business Introduction  |
| L950574-00-M | Rirchard Fischer        |                 | 7/18/95 | Report on the Transco Meeting held at Transco Tower, Houston, TX - 7/18/95 |
| L950575-00-D | Garilynn Billingsley    |                 | 7/24/95 | Report on Meeting between CIT and REO on 20 July 1995                      |
| L950576-00-P | Phil Lindquist          |                 | 7/25/95 | LIGO Change Control Board Meeting Minutes for 24 July 1995                 |
| L950577-00-P | Phil Lindquist          |                 | 7/25/95 | Change Request CR-950014   |
| L950578-00-U |                         |                 | 10/2/95 | missing document   |
| L950581-00-M | Gary Sanders            |                 | 7/27/95 | Follow-Up on Livingston Meeting of 6 July 1995                             |
| L950582-00-M | Gary Sanders            |                 | 7/26/95 | Annual Caltech LIGO Staff Salary Review                                    |
| L950583-00-M |                         |                 | 7/28/95 | This document number changed to LIGO-G950070-00-M                          |
| L950584-00-P | Syd Meshkov             |                 | 7/31/95 | Project Control Meeting Minutes for 26 July 1995                           |
| L950586-00-P | Graham H. Fernald, Esq. |                 | 7/28/95 | Taxes in Washington: Research and Development Credits                      |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-------------------------|-----------------|---------|---|
| L950587-00-P | Phil Lindquist          |                 | 7/31/95 | Annual Work Plan Preparations - FY 1996   |
| L950588-00-M | Graham H. Fernald, Esq. |                 | 7/30/95 | Taxes in Washington: Sales Tax Exemption if NSF Owns the Project  |
| L950588-00-O | John Worden             |                 | 7/30/95 | Mechanical Building Space Requirements, LVEA Storage  |
| L950589-00-P | Ed Jasnow               |                 | 7/31/95 | LIGO Project Beam Tube Modules  |
| L950590-00-O | Fred Asiri              |                 | 7/31/95 | Caltech/Parsons Weekly Meeting Minutes for 31 July 1995   |
| L950591-00-F | Mark Coles              |                 | 8/3/95  | Oversight and Liaison with Major Facilities Subcontractors  |
| L950592-00-O |                         |                 | 8/3/95  | Transco/LIGO Meeting Minutes of 18 July 1995  |
| L950593-00-E | Albert Lazzarini        |                 | 7/28/95 | Determination of the Minimum LN2 Trap Inner Diameter Needed to Shield it from Direct Line of Sight from a Test Mass |
| L950594-00-P | Syd Meshkov             |                 | 8/7/95  | Project Control Meeting Minutes for 2 August 1995   |
| L950595-00-B | Ed Jasnow               |                 | 8/4/95  | Request for Quotation on Baffles  |
| L950596-00-B | Ed Jasnow               |                 | 8/4/95  | Request for Quotation on Baffles  |
| L950597-00-B | Ed Jasnow               |                 | 8/4/95  | Request for Quotation for Baffles   |
| L950599-00-D | Garilynn Billingsley    |                 | 8/10/95 | HDOS Meeting Report for 3 August 1995   |
| L950600-00-D | Alex Abramovici         |                 | 8/8/95  | Transmittal of LIGO-T950047-01-E  |
| L950601-00-E | Alex Abramovici         |                 | 8/8/95  | Transmittal of LIGO-T950047-01-E  |
| L950602-00-E | Alex Abramovici         |                 | 8/8/95  | Transmittal of LIGO-T950047-00-E  |
| L950603-00-M | Thomas Kirk             |                 | 6/14/95 | Final Report of LIGO Review Committee for the NSF Review of LIGO  |
| L950604-00-M | Dr. David Berley        |                 | 8/2/95  | NSF Review Report from 22-24 May 1995   |
| L950605-00-O | Ed Jasnow               |                 | 8/30/95 | Pre-Bid Meeting and Job Walk for Livingston   |
| L950606-00-R | Stan Whitcomb           |                 | 8/9/95  | Letter of Recommendation for Uta Weiland  |
| L950607-00-P | Phil Lindquist          |                 | 8/10/95 | LIGO Change Control Board Meeting   |
| L950608-00-P | Fred Raab               |                 | 8/11/95 | Project Control Meeting Minutes for 9 August 1995   |
| L950609-00-O | Otto Matherny           |                 | 8/9/95  | PUD Proposal for the LIGO Support   |
| L950610-00-M | Beth Moore              |                 | 8/9/95  | Transmittal of MOU between CGPG of the Pennsylvania State University and LIGO                                       |
| L950611-00-M | Beth Moore              |                 | 8/9/95  | Memorandum of Understanding Between the Syracuse University Experimental Relativity Group and LIGO                  |
| L950612-00-M | Beth Moore              |                 | 8/9/95  | Memorandum of Understanding Between University of Colorado and LIGO   |
| L950613-00-M | Beth Moore              |                 | 8/9/95  | Memorandum of Understanding between GALILEO Program at Stanford University and LIGO                                 |
| L950614-00-M | Beth Moore              |                 | 8/9/95  | Internal LIGO Report Evaluating Feasibility of Using Nd:YAG Lasers in LIGO Phase I                                  |
| L950615-00-A | Beth Moore              |                 | 8/29/95 | LIGO Photographs  |
| L950616-00-M | Jerry Burk              |                 | 8/10/95 | Change in Distribution of P.A.N. Forms  |
| L950617-00-M | Barry Barish            |                 | 8/17/95 | Announcement/Posting for Additional Scientists on LIGO Staff  |
| L950618-00-O | Otto Matherny           |                 | 8/10/95 | Livingston Rough Grading Advertisement  |
| L950619-00-O | Otto Matherny           |                 | 8/11/95 | Livingston Rough Grading Advertisement  |
| L950620-00-E | Albert Lazzarini        |                 | 8/10/95 | Black Glass Glazing on 304L S.S.  |
| L950621-00-E | Alex Abramovici         |                 | 8/11/95 | Distribution of LIGO-T950047-01-E   |
| L950622-00-M | Bill Althouse           |                 | 8/11/95 | Letter of Recommendation for Belcan Services  |
| L950623-00-B | Larry Jones             |                 | 8/14/95 | Baffle RFQ Revisions for D950094  |
| L950624-00-B | Larry Jones             |                 | 8/14/95 | Baffle RFQ Revisions, Drawing D950094   |
| L950625-00-B | Larry Jones             |                 | 8/14/95 | Baffle RFQ Revisions, Drawing D950094   |
| L950629-00-O | April Burke             |                 | 8/14/95 | Newspaper Article re Livingston Site Commemoration  |
| L950630-00-P | Phil Lindquist          |                 | 8/15/95 | Change Control Board Meeting Minutes for 14 August 1995   |
| L950631-00-M | Peter Saulson           |                 | 8/15/95 | Request for LIGO Documents for PPAC   |
| L950631-00-R | Dr. Nery Man            |                 | 8/15/95 | Comments on "Laser Nd YAG vs Argon" draft   |
| L950632-00-M | I. Baldon               |                 | 8/18/95 | Pre-Program Advisory Committee Meeting, 8-9 September 1995  |
| L950633-00-M | Peter Babin             |                 | 8/10/95 | Labor Wages for Livingston  |
| L950634-00-M | Gary Sanders            |                 | 8/21/95 | Business Introductions  |
| L950635-00-P | Phil Lindquist          |                 | 8/16/95 | Change Control Board Meeting, 21 August 1995  |
| L950636-00-P | Cindy Akutagawa         |                 | 8/17/95 | LIGO Labor Charges  |
| L950637-00-M | J. H. Krause            |                 | 6/15/95 | Pipeline Adjustment Agreement   |
| L950638-00-M | Rirchard Fischer        |                 | 8/17/95 | Louisiana Site Lease Agreement  |
| L950639-00-P | Dennis Coyne            |                 | 8/11/95 | Project Control Meeting Minutes for 16 August 1995  |
| L950640-00-P | Phil Lindquist          |                 | 8/18/95 | Allocation of Actual Costs - Detail Reports, July 1995  |
| L950642-00-P | Phil Lindquist          |                 | 8/21/95 | Distribution of LIGO Project Monthly Progress Report, July 1995   |
| L950644-00-P | Phil Lindquist          |                 | 8/21/95 | Change Control Board Meeting Minutes for 21 August 1995   |
| L950645-00-P | Phil Lindquist          |                 | 8/22/95 | LIGO Project Signature Authority  |
| L950646-00-M | Gary Sanders            |                 | 4/24/96 | Administrative Confidential   |
| L950647-00-M | Gary Sanders            |                 | 4/24/96 | Administrative Confidential   |



| Document No  | Full Name        | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|------------------|-----------------|---------|--|
| L950649-00-U | Albert Lazzarini |                 | 8/21/95 | CPU-Intensive Computations for LIGO Detector Simulation Using FFTs   |
| L950650-00-M | Dr. David Berley |                 | 8/2/95  | Approval for Formation and Membership of the PPAC  |
| L950651-00-P | Linda Turner     |                 | 8/23/95 | LIGO Document Inventory - Early LIGO Days  |
| L950652-00-E | Albert Lazzarini |                 | 8/22/95 | Closure of AI#15 from the Detector Group Meeting: Definition of Acceptable Data Dropout Rates              |
| L950653-00-M | Gary Miller      |                 | 8/22/95 | Pipeline Adjustment Agreement  |
| L950653-A-M  | Gary Miller      |                 | 8/25/95 | Sorrento to Dixie 6-inch Pipeline; Pipeline Adjustment Agreement   |
| L950654-00-P | Linda Turner     |                 | 7/31/95 | Office Needs/Problems  |
| L950655-00-V |                  |                 | 8/23/95 | Proposed Contract for Vacuum Equipment   |
| L950656-00-P | Phil Lindquist   |                 | 8/23/95 | Allocation of Actual Costs - Year-to-Date Detail Reports, July 1995  |
| L950657-00-E | Albert Lazzarini |                 | 8/24/95 | Process and Coating Material for Optical Baffling System   |
| L950658-00-O | Carl Marshall    |                 | 8/3/95  | LIGO Project Dehumidification Review   |
| L950659-00-P | Phil Lindquist   |                 | 8/24/95 | Labor Distribution Detail Report   |
| L950660-00-P | Phil Lindquist   |                 | 8/25/95 | Annual Work Plan - Resume Updates  |
| L950661-00-M | Gary Miller      |                 | 8/25/95 | Pipeline Adjustment Agreement - Signed   |
| L950662-00-M | Wes Yonge        |                 | 8/25/95 | LIGO Cost Estimate   |
| L950663-00-P | Linda Turner     |                 | 8/28/95 | Proposed Engineering Drawing Template  |
| L950664-00-P | Rolf Bork        |                 | 8/29/95 | Project Control Meeting Minutes for 23 August 1995   |
| L950665-00-D | Seiji Kawamura   |                 | 8/29/95 | SUS PDR  |
| L950666-00-P | Phil Lindquist   |                 | 9/8/95  | Distribution of MIT Costs Invoiced for June 1995   |
| L950667-00-D | Robbie Vogt      |                 | 8/30/95 | SUS PDR  |
| L950668-00-P | Ed Jasnow        |                 | 8/31/95 | Proposed Contract for Vacuum Equipment   |
| L950669-00-P | Cindy Akutagawa  |                 | 9/8/95  | DRAFT System Requirements for LIGO Procurement System/Database   |
| L950669-00-P | Phil Lindquist   |                 | 9/8/95  | DRAFT System Requirements for LIGO Procurement System/Database   |
| L950700-00-B | Larry Jones      |                 | 9/5/95  | Site Services Issues for Beam Tube Contract  |
| L950701-00-P | Dennis Coyne     |                 | 9/5/95  | Project Control Meeting Minutes for 30 August 1995   |
| L950702-00-P | Donna Tomlison   |                 | 9/6/95  | PPAC Interdepartmental Meeting Requests  |
| L950703-00-B | Larry Jones      |                 | 9/6/95  | Annual Work Plan: Beam Tube, 1996  |
| L950704-00-M | April Burke      |                 | 9/6/95  | Congressional Research Service (CRS) Report on LIGO  |
| L950705-00-M | Earl Friese      |                 | 8/23/95 | Project Management Plan  |
| L950706-00-M | Beth Moore       |                 | 9/7/95  | Dr. Krzysztof Sliwa Appointment  |
| L950707-00-D | Robbie Vogt      |                 | 8/30/95 | Quarterly Report and Annual Work Plan for 1996   |
| L950708-00-M | Kevin Reilly     |                 | 8/28/95 | Approved Line of Credit with State of Louisiana  |
| L950709-00-P | Syd Meshkov      |                 | 9/11/95 | Project Control Meeting Minutes for 6 September 1995   |
| L950710-00-B | Larry Jones      |                 | 9/11/95 | Preview of LIGO Arm Layout and Baffle Drawings   |
| L950712-00-O | Peter Babin      |                 | 9/11/95 | Union Labor Rate Dispute   |
| L950713-00-P | Phil Lindquist   |                 | 9/12/95 | Quarterly Report Submittals  |
| L950714-00-O | Steve Robinson   |                 | 9/12/95 | Advance Notification from Office of Commerce and Industry  |
| L950715-00-M | Eleanor Griffin  |                 | 9/1/95  | LIGO Contract Information for Liability Coverage   |
| L950716-00-M | Karen Sandberg   |                 | 8/31/95 | Grant Award  |
| L950717-00-A | Stan Whitcomb    |                 | 12/5/95 | Submittal of Manuscript  |
| L950718-00-M | Rirchard Fischer |                 | 7/17/75 | Union Letter Draft   |
| L950719-00-M | R. Eisenstein    |                 | 8/1/95  | Grant Award  |
| L950720-00-M | Robert L. Byer   |                 | 8/16/95 | Revisions and Clarifications for MOU with the Galileo Program at Stanford University                       |
| L950721-00-M | Chris Hoffer     |                 | 8/16/95 | Sample Letter of Intent  |
| L950722-00-M | Barry Barish     |                 | 9/14/95 | Decision to Switch to YAG Lasers   |
| L950722-00-M | Gary Sanders     |                 | 9/14/95 | Decision to Switch to YAG Lasers   |
| L950723-00-B | Larry Jones      |                 | 9/15/95 | Quarterly Report Submittal for Beam Tube   |
| L950724-00-P | Phil Lindquist   |                 | 9/18/95 | Annual Work Plan, DRAFT  |
| L950725-00-D | David Shoemaker  |                 | 9/18/95 | LIGO ASC Optical Lever Design and Prototype Testing Schedule, dated 13 September 1995 (Including holidays) |
| L950725-00-D | John Tappan      |                 | 9/18/95 | LIGO ASC Optical Lever Design and Prototype Testing Schedule, dated 13 September 1995 (Including holidays) |
| L950726-00-P | Syd Meshkov      |                 | 9/18/95 | Project Control Meeting Minutes for 13 September 1995  |
| L950727-00-P | Phil Lindquist   |                 | 9/18/89 | Allocation of Actual Costs - Detail Reports, August 1995   |
| L950728-00-M | Gary Sanders     |                 | 9/19/95 | Apology for Poor Form/Brochure   |
| L950729-00-M | Donna Tomlison   |                 | 9/19/95 | NSF LIGO Technical Review Agenda for 9-11 October 1995   |
| L950730-00-M | Nancy Dougherty  |                 | 9/19/95 | LSU/LIGO/Transco Easement Agreement Review   |
| L950731-00-M | Rirchard Fischer |                 | 9/19/95 | Qualifications for Washington R & D Exemption  |
| L950734-00-D | Robert Spero     |                 | 9/19/95 | SUS Design Requirements Review Report  |

| Document No  | Full Name                     | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|-------------------------------|-----------------|----------|--|
| L950735-00-O |                               |                 | 9/20/95  | Advertisement from Daily Journal of Commerce   |
| L950736-00-M | Graham H. Fernald, Esq.       |                 | 9/21/95  | LIGO-Washington Tax Credit   |
| L950739-00-M | Phil Lindquist                |                 | 9/25/95  | Quarterly Report, Draft  |
| L950741-00-P | Syd Meshkov                   |                 | 9/25/95  | Project Control Meeting Minutes for 20 September 1995  |
| L950742-00-M | Rirchard Fischer              |                 | 9/24/95  | Washington Tax Exemption Presentation Agenda   |
| L950743-00-M | Rirchard Fischer              |                 | 9/24/95  | Liability Insurance for Livingston   |
| L950744-00-P | Phil Lindquist                |                 | 9/25/95  | Change Request CR-950022, General Computing  |
| L950745-00-M | Graham H. Fernald, Esq.       |                 | 9/25/95  | Sales Tax on the LIGO in Washington: Ownership Issues  |
| L950746-00-M | Beth Moore                    |                 | 9/25/95  | Photograph Request   |
| L950747-00-M | Beth Moore                    |                 | 9/21/95  | Invitation to attend NSF Review 9-11 October 1995  |
| L950748-00-E | Albert Lazzarini              |                 | 9/26/95  | LIGO Requirements and Specifications Document Tree, Preliminary Draft  |
| L950749-00-M | Robert Powell                 |                 | 9/27/95  | Vacuum Equipment Contract Press Release  |
| L950750-00-P | Albert Lazzarini              |                 | 9/27/95  | SOW for Parker EMC Engineering   |
| L950751-00-P | Phil Lindquist                |                 | 9/27/95  | Change Control Board Meeting Minutes for 25 September 1995   |
| L950752-00-P | Phil Lindquist                |                 | 9/28/95  | Project Quarterly Report ending with August 1995   |
| L950753-00-E | Betty Behnke                  |                 | 9/28/95  | Viewgraphs from Science and Integration Meeting, 21-22 September 1995  |
| L950755-00-M | Peter Saulson                 |                 | 9/19/95  | PPAC Meeting Minutes for 8-9 September 1995  |
| L950756-00-M | Peter Saulson                 |                 | 9/25/95  | Progress on LIGO Research Community Charter and Nominations  |
| L950757-00-M | Peter Saulson                 |                 | 9/26/95  | LIGO Research Community Executive Committee Candidates and Charter   |
| L950758-00-M | Syd Meshkov                   |                 | 2/9/95   | Aspen Meeting Communique   |
| L950759-00-M | Sandy Pool                    |                 | 9/26/95  | Analysis of Tax Issues and Presentation to the NSF   |
| L950760-00-E | Kent Blackburn                |                 | 9/29/95  | Interferometer Noise Meeting Minutes - MIT, 14-15 September 1995   |
| L950761-00-P | Syd Meshkov                   |                 | 10/2/95  | Project Control Meeting Minutes for 27 September 1995  |
| L950762-00-D | Anthony Campillo              |                 | 9/29/95  | Manuscript Revision Suggestions  |
| L950763-00-M | Anne Vicknair                 |                 | 9/29/95  | 1995 Enterprise Zone Program   |
| L950764-00-M | California Institute of Tech. |                 | 9/29/95  | NSF Review Materials - Reviewer's Documentation Package  |
| L950765-00-M | Ronald Adams                  |                 | 9/28/95  | Letter of Intent   |
| L950767-00-P | Phil Lindquist                |                 | 10/2/95  | Distribution of MIT Costs Invoiced for July 1995   |
| L950770-00-E | Albert Lazzarini              |                 | 10/3/95  | LIGO Science Requirements Documents, Level 1 Specification   |
| L950770-00-E | Rai Weiss                     |                 | 10/3/95  | LIGO Science Requirements Documents, Level 1 Specification   |
| L950771-00-M | Fred Raab                     |                 | 10/3/95  | Remote Sites Planning Meeting Minutes for 3 October 1995   |
| L950772-00-M | I. Baldon                     |                 | 10/3/95  | Reimbursement to Caltech for Airfare to Cleveland, OH for Al Lazzarini   |
| L950773-00-R | Stan Whitcomb                 |                 | 10/4/95  | Official Notification of Funding for Moscow State University   |
| L950775-00-M | Beth Moore                    |                 | 10/4/95  | Receipts for Hotel   |
| L950776-00-E | Dennis Coyne                  |                 | 9/28/95  | Request for Review/Comment on the Draft Vacuum Equipment (VE) - Civil Construction (CC) Interface Control Document (ICD) |
| L950777-00-M | Earl Friese                   |                 | 10/2/95  | Required Certifications for NSF Conflict of Interest Compliance  |
| L950778-00-M | Lew Allen                     |                 | 10/6/95  | LIGO Oversight Committee Meeting Minutes for 31 July 1995  |
| L950779-00-P | Irena Petrac                  |                 | 10/6/95  | Procurement Lead Times, Change Order 16 to MIT Contract  |
| L950780-00-P | Syd Meshkov                   |                 | 10/4/95  | Project Control Meeting Minutes for 4 October 1995   |
| L950781-00-M | Beth Moore                    |                 | 10/6/95  | Women and Minority Representation in LIGO Project  |
| L950782-00-M | Steve Robinson                |                 | 10/6/95  | Sales Tax Exemption in Louisiana on Sales for Resale   |
| L950783-00-M | Phil Lindquist                |                 | 10/18/95 | Transmitting Continuation Proposal and MIT Budget Request for NSF  |
| L950783-00-P | Phil Lindquist                |                 | 10/7/95  | Transmittal of Annual Work Plan '96  |
| L950785-00-M | Steve Robinson                |                 | 10/11/95 | 1995 East Baton Rouge Parish Enterprise Zone Maps  |
| L950786-00-P | Phil Lindquist                |                 | 10/12/95 | Signed Proposal for MIT LIGO Participation, FY 1996  |
| L950787-00-P | Phil Lindquist                |                 | 10/12/95 | LIGO Change Control Board Meeting Scheduled for 16 October 1995  |
| L950788-00-P | Cindy Akutagawa               |                 | 10/16/95 | Allocation of Actual Costs - Detail Report, End of September 1995  |
| L950789-00-M | Gary Sanders                  |                 | 10/13/95 | Anticipated Delay in Residence Sale: Mark Coles  |
| L950790-00-M | Gary Sanders                  |                 | 10/13/95 | Delayed Relocation of Rolf Bork  |
| L950791-00-V | John Worden                   |                 | 10/16/95 | Vacuum Equipment Agreements and Commitments with PSI   |
| L950792-00-M | Fred Raab                     |                 | 10/16/95 | Remote Sites Planning Committee Meeting Minutes for 16 October 1995  |
| L950793-00-E | Albert Lazzarini              |                 | 10/16/95 | Request for LIGO and VIRGO Meeting in Near Future  |
| L950794-00-P | Syd Meshkov                   |                 | 10/16/95 | Project Control Meeting Minutes for 12 October 1995  |
| L950795-00-M | Cheryl Glenn                  |                 | 10/6/95  | Transmittal of Signed MOU with University of Colorado and LIGO   |
| L950796-00-E | Dennis Coyne                  |                 | 10/19/95 | Abstract for presentation at the IEEE Aerospace Applications Conference  |
| L950797-00-M | Earl Friese                   |                 | 10/5/95  | Realignment of Budget for Subaward to Tufts University for Professor Sliwa   |
| L950798-00-M | Earl Friese                   |                 | 10/10/95 | GSA Draft Guidelines for Citing of Antennas  |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|-------------------------|-----------------|----------|--|
| L950799-00-A | I. Baldon               |                 | 10/18/95 | Relocation Travel Receipts - David Barker and Phil Lindquist   |
| L950800-00-P | Phil Lindquist          |                 | 10/19/95 | LIGO Change Control Board Meeting Minutes for 16 October 1995  |
| L950801-00-E | Albert Lazzarini        |                 | 10/13/95 | LIGO Integration Meeting Minutes for 13 October 1995   |
| L950803-00-M | Barry Barish            |                 | 10/19/95 | Louisiana Rough Grading - Additional Road  |
| L950804-00-M | Dr. David Berley        |                 | 10/2/95  | Agenda and Materials for NSF Review, 9-11 October 1995   |
| L950805-00-B | Larry Jones             |                 | 10/20/95 | Power Requirements for Beam Tube Module Bake   |
| L950806-00-P | Syd Meshkov             |                 | 10/23/95 | Project Control Meeting Minutes for 18 October 1995  |
| L950807-00-P | Phil Lindquist          |                 | 10/23/95 | Transmittal of Monthly Progress Report for September 1995  |
| L950808-00-D | Robbie Vogt             |                 | 10/23/95 | SUS DRR Action Items   |
| L950809-00-B | Gary Sanders            |                 | 11/3/95  | LIGO Beam Tube Source Selection Board Meeting  |
| L950810-00-E | William Young           |                 | 10/30/95 | LIGO Naming Conventions  |
| L950811-00-P | Phil Lindquist          |                 | 10/23/95 | Change Request CR-950023 - TDM to Parsons Regarding Hanford Beam Tube Enclosure Draft Final Design Package                             |
| L950812-00-B | Gary Sanders            |                 | 10/25/95 | LIGO Beam Tube Review Board Meeting with Agenda  |
| L950814-00-M | Graham H. Fernald, Esq. |                 | 10/24/95 | LIGO at Hanford - Wahsington Taxes   |
| L950818-00-M | Beth Moore              |                 | 10/19/95 | Transmittal of MOU's   |
| L950819-00-M | Beth Moore              |                 | 10/19/95 | Transmittal of MOU   |
| L950820-00-P | Rita Torres             |                 | 10/26/95 | Subcontracts Need LIGO Numbers and Other Data  |
| L950821-00-E | Dennis Coyne            |                 | 10/27/95 | Caltech-Parsons Technical Interchange Meeting Minutes for 12 October 1995  |
| L950822-00-M | Sandy Pool              |                 | 10/26/95 | Performance Bond   |
| L950823-00-M | Gary Sanders            |                 | 10/26/95 | Relocation Expenses for Rolf Bork  |
| L950826-00-M | Jerry Burk              |                 | 10/26/95 | Relocation of Dr. Gary Sanders - Residence Disposal Assistance   |
| L950827-00-P |                         |                 | 10/25/95 | 1996 Indirect Cost Rates and 1997 and 1998 Forward Pricing Rates for Indirect Cost   |
| L950828-00-M | Graham H. Fernald, Esq. |                 | 10/27/95 | Draft letter to Department of Revenue, State of Washington Regarding Tax Issues  |
| L950829-00-M | Steve Robinson          |                 | 10/26/95 | LIGO Project - Enterprise Zone   |
| L950830-00-V | Mike Zucker             |                 | 10/30/95 | Rrelocation of Ports "D" on Ham Chamber Design   |
| L950831-00-P | Syd Meshkov             |                 | 10/30/95 | Project Control Meeting Minutes for 25 October 1995  |
| L950832-0-O  | Ed Jasnow               |                 | 4/16/96  | Commercial Power Contract, LIGO Site, Livingston, LA - Reference P.O. PC197005 With DEMCO For Electric Power to the Livingston Site.   |
| L950832-00-M | Eleanor Griffin         |                 | 10/30/95 | Request for Evidence of Insurance  |
| L950834-00-P | Phil Lindquist          |                 | 10/30/95 | LIGO Change Control Board Meeting Minutes of 25 October 1995   |
| L950834-00-U |                         |                 | 2/7/96   |  |
| L950835-00-V | John Worden             |                 | 10/31/95 | More Vacuum Equipment Agreements and Commitments with PSI  |
| L950836-00-P | Phil Lindquist          |                 | 11/1/95  | Document Control Center (DCC) Status   |
| L950837-00-P | Linda Turner            |                 | 11/1/95  | Document Control Center (DCC) Presentation Notes for Project Control Meeting   |
| L950838-00-B | Larry Jones             |                 | 11/2/95  | Beam Tube Equipment Qualification Test   |
| L950839-00-P | Phil Lindquist          |                 | 11/17/95 | LIGO Project Monthly Progress Report, October 1995   |
| L950841-00-E | Albert Lazzarini        |                 | 11/8/95  | LIGO Project Policy for Supporting Home Computing by LIGO Staff  |
| L950842-00-V | John Worden             |                 | 11/3/95  | Approval of Vacuum Equipment PDR, CDRL 01 of PSI Contract  |
| L950843-00-A | I. Baldon               |                 | 11/3/95  | Lost Receipts - David Barker and Phil Lindquist  |
| L950843-02-A | I. Baldon               |                 | 11/9/95  | Lost Receipts - Phil Lindquist Relocation  |
| L950844-00-P | Syd Meshkov             |                 | 11/6/95  | Project Control Meeting Minutes for 1 November 1995  |
| L950845-00-A | S. S. Hecker            |                 | 10/24/95 | Responsibilities, Structure, and Operations of the External Advisory Committee (EAC) for Los Alamos National Laboratory                |
| L950846-00-D | Robbie Vogt             |                 | 11/6/95  | Alignment Sensing and Control (ASC) Optical Level (Opt Lev) Component and Optical Level Controls (CDS) Design Requirement Review (DRR) |
| L950847-00-D | Bill Althouse           |                 | 11/6/95  | ASC Design Requirements Review Report  |
| L950848-00-D | Bill Althouse           |                 | 11/6/95  | Prestabilized Laser (PSL) Preliminary Design Review Report   |
| L950849-00-E | Dennis Coyne            |                 | 11/3/95  | Transmittal of Final Draft Vacuum Equipment (VE) - Civil Construction (CC) Interface Control Document (ICD)                            |
| L950849-00-E | Albert Lazzarini        |                 | 11/3/95  | Transmittal of Final Draft Vacuum Equipment (VE) - Civil Construction (CC) Interface Control Document (ICD)                            |
| L950851-00-F | Rick Savage             |                 | 11/7/95  | Participation in LIGO Facilities Performance Predictions Preview Meeting, 26 October 1995  |
| L950852-00-F | Rick Savage             |                 | 11/7/95  | Participation in LIGO Facilities Performance Predictions Preview Meeting, 26 October 1995  |
| L950853-00-F | Rick Savage             |                 | 11/7/95  | Flow of Natural Gas through the Transco Pipelines  |
| L950854-00-F | Rick Savage             |                 | 11/7/95  | HD5 Propane Flow through the Enterprise Pipeline   |
| L950855-00-D | Bill Althouse           |                 | 11/7/95  | ASC OPT LEV and OPT LEV Controls DRR   |
| L950856-00-A | Beth Moore              |                 | 11/14/95 | Administrative Confidential  |
| L950857-00-A | Gary Sanders            |                 | 11/9/95  | Return of Questionnaire  |
| L950859-00-A | Beth Moore              |                 | 11/14/95 | Administrative Confidential  |
| L950861-00-R | Stan Whitcomb           |                 | 11/10/95 | Acknowledgement of Application   |
| L950862-00-R | Stan Whitcomb           |                 | 11/10/95 | Acknowledgment of Application  |
| L950863-00-R | Stan Whitcomb           |                 | 11/10/95 | Acknowledgment of Application  |

| Document No  | Full Name        | ContractorDocNo | Doc Dt   | Full Title   |
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| L950864-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950865-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950866-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950867-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950868-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950869-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950870-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950871-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950872-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950873-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950874-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950875-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950876-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950877-00-A | Stan Whitcomb    |                 | 11/20/95 | Acknowledgement of Application   |
| L950878-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950879-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950880-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950881-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950882-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950883-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950884-00-R | Stan Whitcomb    |                 | 11/10/95 | Acknowledgment of Application  |
| L950885-00-A | Stan Whitcomb    |                 | 11/20/95 | Acknowledgement of Application   |
| L950887-00-M | Cindy Akutagawa  |                 | 11/13/95 | Allocation of Actual Costs - Detail Report, October 1995   |
| L950889-00-P | Syd Meshkov      |                 | 11/13/95 | Project Control Meeting Minutes for 8 November 1995  |
| L950889-00-U | Syd Meshkov      |                 | 11/13/95 | Project Control Meeting Minutes for 8 November 1995  |
| L950890-00-D | Robbie Vogt      |                 | 11/13/95 | PSL PDR Action Items   |
| L950891-00-F | Rick Savage      |                 | 11/14/95 | Flow Activity in the Capline 40" Crude Oil Pipeline  |
| L950892-00-E | William Young    |                 | 11/13/95 | Grounding and Shielding Meeting Minutes for 7 November 1995  |
| L950893-00-U | John Worden      |                 | 11/14/95 | LVEA Floor Elevation as Required by PSI  |
| L950894-00-E | Dennis Coyne     |                 | 11/27/95 | Beam Tube (BT) - Civil Construction (CC) Interface Control Document (ICD), Initial Release and Final Draft |
| L950894-00-E | Albert Lazzarini |                 | 11/27/95 | Beam Tube (BT) - Civil Construction (CC) Interface Control Document (ICD), Initial Release and Final Draft |
| L950894-00-U | Dennis Coyne     |                 | 11/13/95 | Distribution of Final Draft Beam Tube (BT) - Civil Construction (CC) Interface Control Document (ICD)      |
| L950894-00-U | Albert Lazzarini |                 | 11/13/95 | Distribution of Final Draft Beam Tube (BT) - Civil Construction (CC) Interface Control Document (ICD)      |
| L950895-00-P | Phil Lindquist   |                 | 11/14/95 | LIGO Change Control Board Meeting, 16 November 1995  |
| L950896-00-A | Gary Sanders     |                 | 4/24/96  | Administrative Confidential  |
| L950898-00-V | John Worden      |                 | 11/16/95 | Vacuum Loads on the LVEA Slab  |
| L950899-00-A | Beth Moore       |                 | 11/15/95 | Caltech Identification Card for Contracted Personnel - William Young, Craig Conley, Linda Turner           |
| L950902-00-A | Gary Sanders     |                 | 4/24/96  | Administrative Confidential  |
| L950903-00-P | Phil Lindquist   |                 | 11/17/95 | LIGO Change Control Board (CCB) Meeting Minutes, 16 November 1995  |
| L950905-00-A | Stan Whitcomb    |                 | 11/20/95 | Acknowledgement of Application   |
| L950906-00-P | Syd Meshkov      |                 | 11/20/95 | Project Control Meeting Minutes for 15 November 1995   |
| L950907-00-V | Mike Zucker      |                 | 10/31/95 | PSI Needs List Items 1 and 3 - Site Soil and Vibration Data  |
| L950908-00-R | Stan Whitcomb    |                 | 11/22/95 | Acknowledgement of Application   |
| L950909-00-R | Stan Whitcomb    |                 | 11/22/95 | Acknowledgement of Application   |
| L950910-00-R | Stan Whitcomb    |                 | 11/22/95 | Acknowledgement of Application   |
| L950911-00-D | Robbie Vogt      |                 | 11/21/95 | ASC (System) DRR Action Items  |
| L950912-00-M | Ben Lucas        |                 | 11/22/95 | LIGO Project Safety Plan   |
| L950912-00-P | Phil Lindquist   |                 | 11/21/95 | LIGO Change Control Board (CCB) Meeting Minutes, 21 November 1995  |
| L950913-00-P | Rirchard Fischer |                 | 11/21/95 | Federal Project Designation for the LIGO Project   |
| L950915-00-O | Mark Coles       |                 | 11/21/95 | Commendation for LIGO Building Preliminary Design Review on 9 November 1995                                |
| L950915-00-V | William Tyler    |                 | 11/20/95 | Quality Assurance (QA) Review/Comments for PSI CDRL 02   |
| L950916-00-V | Ben Lucas        |                 | 11/22/95 | PSI Project Management Plan Review Comments - CDRL 02  |
| L950917-00-D | Bill Althouse    |                 | 11/22/95 | Viewgraphs from ASC Opt Lev Review   |
| L950918-00-D | Robbie Vogt      |                 | 11/30/95 | 1995 Annual Report Input - Detector  |
| L950919-00-M | Karen Sandberg   |                 | 11/22/95 | Award of Grant to CIT for Tufts University   |
| L950920-00-M | Gary Sanders     |                 | 4/24/96  | Administrative Confidential  |
| L950921-00-M | S. Smart         |                 | 11/27/95 | Solicitation for Use for Electrical Services in Livingston   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------|-----------------|----------|---|
| L950922-00-B | Larry Jones             |                 | 11/27/95 | Transmittal of Beam Tube Modules - Fabrication and Installation Contract PC181520 between CBI and CIT                   |
| L950923-03-M | Gary Sanders            |                 | 12/6/95  | LIGO Organizational Changes   |
| L950923-03-M | Barry Barish            |                 | 12/6/95  | LIGO Organizational Changes   |
| L950924-00-A | Gary Sanders            |                 | 4/24/96  | Administrative Confidential   |
| L950926-00-A | Stan Whitcomb           |                 | 12/4/95  | Acknowledgement of Application  |
| L950927-00-A | Stan Whitcomb           |                 | 12/4/95  | Acknowledgement of Application  |
| L950927-00-V | John Worden             |                 | 11/29/95 | MORE Vacuum Equipment Agreements and Commitments with PSI   |
| L950928-00-V | John Worden             | V049-5-001/003  | 11/29/95 | Vacuum Equipment Corner Station Beam Manifolds  |
| L950928-00-V | Mike Zucker             | V049-5-001/003  | 11/29/95 | Vacuum Equipment Corner Station Beam Manifolds  |
| L950931-00-M | John Schlue             |                 | 12/4/95  | Revised JPL Task Plan for the Safety, Reliability and Quality Assurance Support for the Caltech LIGO Project            |
| L950933-00-M | Gary Sanders            |                 | 12/1/95  | Request for Letter Proposal   |
| L950934-00-V | John Worden             |                 | 11/3/95  | Alignment Mounuments as Requested by PSI  |
| L950935-00-V | John Worden             |                 | 12/1/95  | More: Vacuum Equipment Agreements and Commitments with PSI  |
| L950936-00-P | Phil Lindquist          |                 | 12/4/95  | LIGO Change Control Board Meeting for 4 December 1995   |
| L950937-00-P | Phil Lindquist          |                 | 12/4/95  | DCC Database Presentation/Demonstration and Comments on ACCESS-95   |
| L950938-00-B | Larry Jones             |                 | 12/4/95  | Equipment Qualification Test Procedure  |
| L950939-00-P | Syd Meshkov             |                 | 12/4/95  | Project Control Meeting Minutes for 29 November 1995  |
| L950940-00-E | Albert Lazzarini        |                 | 12/4/95  | LIGO Requirements for GPS Monuments at Washington   |
| L950941-00-O | Otto Matherny           |                 | 12/4/95  | Transmittal of Signed PUD Contract (LIGO-C951271-00-O)  |
| L950942-00-A | I. Baldon               |                 | 12/5/95  | Registrations for Dennis Coyne for Aerospace Applications Conference, 3-10 February 1995                                |
| L950943-00-A | Stan Whitcomb           |                 | 12/6/95  | Acknowledgement of Application  |
| L950944-00-A | Stan Whitcomb           |                 | 12/5/95  | Acknowledgement of Application  |
| L950945-00-A | Stan Whitcomb           |                 | 12/6/95  | Acknowledgement of Application  |
| L950946-00-A | Stan Whitcomb           |                 | 12/6/95  | Acknowledgement of Application  |
| L950947-00-M | Ben Lucas               |                 | 12/5/95  | Transmittal of Safety Plan  |
| L950948-00-M | Ben Lucas               |                 | 12/5/95  | Transmittal of Safety Plan  |
| L950949-00-O | Mark Coles              |                 | 12/4/95  | Procedure for Facilities Group Approval of TDM's  |
| L950950-00-P | Phil Lindquist          |                 | 12/5/95  | LIGO Change Control Baord (CCB) Meeting Minutes - 4 December 1995   |
| L950951-00-E | Albert Lazzarini        |                 | 12/5/95  | Facility Monitoring and Control System (FMCS) Options   |
| L950953-00-O | Rick Savage             |                 | 12/5/95  | Request to Review W.H. Parker's Report "Summary of Electromagnetic Compatibility Concerns and Topics Discussed to Date" |
| L950954-01-M | Gary Sanders            |                 | 12/5/95  | Testimony for Application for Immigration of Dr. Yuri Alexeevich Kamyshkov  |
| L950955-00-A | Stan Whitcomb           |                 | 12/7/95  | Acknowledgement of Application  |
| L950956-00-A | Stan Whitcomb           |                 | 12/7/95  | Acknowledgement of Application  |
| L950962-00-P | Cindy Akutagawa         |                 | 12/8/95  | LIGO Project Signature Authority - Update   |
| L950963-00-A | Stan Whitcomb           |                 | 12/11/95 | Acknowledgement of Application  |
| L950964-00-A | Stan Whitcomb           |                 | 12/11/95 | Acknowledgement of Application  |
| L950965-00-V | John Worden             |                 | 12/8/95  | PSI Proposal for Large Gate Valve Weld Stubs (Change Order Request 7)   |
| L950966-00-P | Syd Meshkov             |                 | 12/11/95 | Project Control Meeting Minutes for December 6, 1995  |
| L950968-00-E | Rai Weiss               |                 | 11/21/95 | XPS results from New Slurry Frit and Flycut Stainless Steel   |
| L950969-00-M | Graham H. Fernald, Esq. |                 | 12/14/95 | Draft Letter regarding Washington Taxes on the LIGO Project   |
| L950970-00-M | Sandy Pool              |                 | 12/6/95  | Definition of Parameters for Additional Legal Counsel   |
| L950971-00-R | Keshra Sangwal          |                 | 12/18/95 | Recommendation letter for Dr. Andri Audrukhiv   |
| L950972-00-A |                         |                 | 11/28/95 | Recommendation letter for Yuriy Krasner   |
| L950973-00-O | Rick Savage             |                 | 12/20/95 | Review of Lightning Protection Recommendations  |
| L950974-00-P | Kathy Sullivan          |                 | 12/22/95 | LIGO Ocular Examination at Huntington Memorial Hospital's Occupational Health Center                                    |
| L950975-00-M | April Burke             |                 | 12/19/95 | Press Release re Contract Award to CBI to Supply LIGO Beam Tube Modules   |
| L950976-00-B | Paul A. LoBello         |                 | 11/16/95 | Press Release Regarding Praxair's Offer to Purchase CBI Industries  |
| L950977-00-C | Daniel Sigg             |                 | 12/1/95  | Calcuations   |
| L950978-00-M | Earl Friese             |                 | 11/30/95 | Transmittal of Monthly Progress Report, October 1995  |
| L950979-00-P | Lew Allen               |                 | 12/4/95  | Signature Page for Recommendation of the Beam Tube Review Committee   |
| L950980-00-E | Albert Lazzarini        |                 | 8/7/95   | Glints from Baffle  |
| L950981-00-P | Linda Turner            |                 | 7/31/95  | DCC Office Needs/Problems   |
| L950982-00-A | Beth Moore              |                 | 8/18/95  | DCC Office Changes  |
| L950983-00-D |                         |                 | 11/27/95 | Analytic Continuation of Hij Calculation and Alternative Type of Expansion Epoch  |
| L950984-00-E | David Shoemaker         |                 | 11/27/95 | Interface Sign-Off Sheet  |
| L950985-00-P | Phil Lindquist          |                 | 11/22/95 | Document Control Center Issues  |
| L950986-00-P | Gary Sanders            |                 | 10/17/95 | Tracking Significant E-Mail and Phone Conversations with Contractors  |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|-------------------------|-----------------|----------|--|
| L950987-00-O | A. Rohay                |                 | 10/9/95  | Schedule of Milestone and Deliverables for BNW Proposal #24827   |
| L950988-00-M | Ed Baker                |                 | 10/3/95  | Receipt of Advance Notification  |
| L950989-00-O | Linda Porter            |                 | 10/30/95 | Advertisement for Grading and Placing Beam Tube Slab in Hanford  |
| L950990-00-M | S. Smart                |                 | 10/31/95 | Sale Tax Rate - Livingston   |
| L950991-00-M |                         |                 | 9/26/95  | Charter of the LIGO Research Community   |
| L950992-00-O | Jan Szwed               |                 | 10/2/95  | Stranco References   |
| L950993-00-O | Mark Coles              |                 | 9/18/85  | Agenda for Facilities Group Meeting of 18 September 1995   |
| L950994-00-B | Larry Jones             |                 | 6/21/95  | Stainless Steel Sheet Finishes   |
| L950995-00-M | Joel E. Tohline         |                 | 6/30/95  | Proposal for LIGO Project Support - Livingston   |
| L950996-00-M | Robert L. Byer          |                 | 8/16/95  | Suggested Revisions to MOU with Stanford University  |
| L950997-00-P | M. Torres               |                 | 12/8/95  | Subcontract with Hytec   |
| L950998-00-A | Barry Barish            |                 | 11/30/95 | Letter of Invitation for Caltech Visit   |
| L950999-00-V | Mike Zucker             |                 | 11/16/95 | Load Calculations  |
| L951000-00-D | Rai Weiss               |                 | 11/14/95 | Request for Action (RFA) - An Integration Plan   |
| L951001-00-D | Alex Abramovici         |                 | 12/13/95 | Location for IR Laser Work   |
| L951002-00-M | Thomas Kirk             |                 | 11/21/95 | Transmittal of Final Report of the LIGO Review Committee for the NSF Review of LIGO, 9-11 October 1995                                     |
| L951004-00-O | Rick Savage             |                 | 12/18/95 | Transmittal of Vibration and Acoustic Requirements to Parsons  |
| L951005-00-M | Lew Allen               |                 | 12/14/95 | LIGO Oversight Committee Meeting for 19 December 1995  |
| L951005-00-O | Rick Savage             |                 | 12/14/95 | Vibration and Acoustic Requirements for the Laser and Vacuum Equipment Area (LVEA) and Vacuum Equipment Areas (VEA) of the LIGO Facilities |
| L951006-00-R | Stan Whitcomb           |                 | 12/14/95 | Visit Scheduling   |
| L951007-00-R | Stan Whitcomb           |                 | 12/14/95 | Acknowledgement of Application   |
| L951009-00-P | Syd Meshkov             |                 | 12/18/95 | Project Control Meeting Minutes for 13 December 1995   |
| L951010-00-V | John Worden             |                 | 12/18/95 | No Changes to Large Gate Valves or 80K Pumps   |
| L951014-00-M | Cindy Akutagawa         |                 | 12/19/95 | Allocation of Actual Costs - Detail Report, November 1995  |
| L951015-00-E | Albert Lazzarini        |                 | 12/20/95 | Revised Vibration and Acoustic Requirements for the LIGO Facilities  |
| L951016-00-P | Cindy Akutagawa         |                 | 12/21/95 | Labor Hour Reports, November 1995  |
| L951017-00-M | Beth Moore              |                 | 12/21/95 | Transmittal of MOU between the Michigan Gravity Wave Group in the Department of Physics of the University of Michigan and LIGO             |
| L951018-00-V | John Worden             |                 | 12/21/95 | Agreements and Commitments with PSI  |
| L951019-00-M | Rirchard Fischer        |                 | 12/19/95 | LIGO Project Application for High Technology Tax Deferral  |
| L951020-00-M | Rirchard Fischer        |                 | 12/19/95 | LIGO Information and Economic Impacts on the Hanford Area  |
| L951022-00-P | Syd Meshkov             |                 | 12/27/95 | Project Control Meeting Minutes for 20 December 1995   |
| L951023-00-A | Stan Whitcomb           |                 | 12/28/95 | Applications for LIGO Science Positions  |
| L951024-00-A | Stan Whitcomb           |                 | 12/28/95 | Upcoming Interviews for LIGO Science Positions   |
| L951026-00-M | Graham H. Fernald, Esq. |                 | 12/15/95 | Research and Development Credit Statute for Hanford  |
| L951027-00-D | Rai Weiss               |                 | 11/14/95 | Request for Actions (RFA's)  |
| L951027-00-E | William Young           |                 | 12/27/95 | AUTOCAD Layer Drawings   |
| L951028-00-P |                         |                 | 11/28/95 | Quotation  |
| L951029-00-V |                         |                 | 9/30/95  | Press Release Regarding Award to PSI   |
| L951030-00-P | Phil Lindquist          |                 | 11/22/95 | DCC Meeting Summary  |
| L951031-00-A | Beth Moore              |                 | 10/31/95 | Reimbursement for Albert Lazzarini's Travel  |
| L951032-00-P |                         |                 | 11/21/95 | Quotation from Triteck Solutions   |
| L951033-00-P |                         |                 | 11/28/95 | JPL Reliability Task Order for LIGO System Engineering and Integration   |
| L951039-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Bill Althouse  |
| L951040-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Fred Asiri   |
| L951041-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Barry Barish   |
| L951042-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Dave Barker  |
| L951043-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Garilynn Billingsley   |
| L951044-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Kent Blackburn   |
| L951045-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Rolf Bork  |
| L951046-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Mark Coles   |
| L951047-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Jordan Camp  |
| L951048-00-A | I. Baldon               |                 | 12/31/95 | 1995 Relocation Expense Reports - Mark Coles   |
| L951049-00-A | I. Baldon               |                 | 12/31/95 | 199 Travel Expense Reports - Dennis Coyne  |
| L951050-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Felix Fernandez  |
| L951051-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Richard Fischer  |
| L951052-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Mike Gamble  |
| L951053-00-A | I. Baldon               |                 | 12/31/95 | 1995 Travel Expense Reports - Edwin Goldwasser   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|-----------------|-----------------|----------|--|
| L951054-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Janeen Hazel   |
| L951055-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Jay Heefner  |
| L951056-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Greg Hiscott   |
| L951057-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Ed Jasnow  |
| L951058-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Larry Jones  |
| L951059-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Andy Kuhnert   |
| L951060-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Albert Lazzarini   |
| L951061-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Phil Lindquist   |
| L951062-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Jennifer Logan   |
| L951063-00-A | I. Baldon       |                 | 12/31/95 | 1995 Travel Expense Reports - Otto Matherny  |
| L951098-00-M | Earl Friese     |                 | 10/23/95 | Transmittal of Progress Report and Continuation Proposal for Review and Approval                           |
| L951099-00-O |                 |                 | 12/13/95 | Distribution Interruption File Inquiry, Baton Rouge Division, from 1 January 1990 through 31 December 1995 |
| L951100-00-O | Jim E. Curtis   |                 | 8/14/95  | NEPA Review of Ligo Power Line   |
| L951101-00-P |                 |                 | 12/31/95 | Project Controls Chronological File - 1995   |
| L951102-00-M | Gary Sanders    |                 | 10/17/95 | Tracking Significant E-mail and Phone Conversations with Contractors                                       |
| L951103-00-M | Linda Turner    |                 | 10/17/95 | Document Tracking  |
| L951104-00-O | Gary Miller     |                 | 8/21/95  | Draft- Sorrento to Dixie 6-Inch Pipeline - Pipeline Adjustment Agreement                                   |
| L951105-00-O | J. Krause       |                 | 6/15/95  | Shell Pipeline Adjustment Agreement  |
| L952000-00-A | David Shoemaker |                 | 1/31/95  | FFT Optics Modeling Development, DRAFT Paper   |
| L952001-00-A | Yaron Hefetz    |                 | 2/7/95   | Progress Report for Interferometer Alignment R&D - January 1995  |
| L952002-00-U | David Shoemaker |                 | 2/3/95   | Preliminary MIT Budget Report for December 1994  |
| L952003-00-D | Peter Fritschel |                 | 2/6/95   | Progress Report for the Phase Noise Interferometer (PNI) - January 1995                                    |
| L952004-00-U | David Shoemaker |                 | 2/16/95  | Change to Alignment Sensing/Control Task Statement of Work for FY 95                                       |
| L952005-00-A | David Shoemaker |                 | 2/23/95  | Transmittal of Draft Paper on the Seismic Isolation Development  |
| L952006-00-U | Peter Fritschel |                 | 2/16/95  | Change to Length Sensing/Control task Statement of Work for FY 95  |
| L952008-00-U | David Shoemaker |                 | 3/9/95   | Proposal for MIT LIGO Participation - FY 1995 (Tasks and Responsibilities MIT LIGO Group will take on)     |
| L952009-00-U | Peter Fritschel |                 | 3/8/95   | Progress Report for the Phase Noise Interferometer (PNI) - February 1995                                   |
| L952010-00-U |                 |                 |          |  |
| L952011-00-R | Yaron Hefetz    |                 | 3/8/95   | Progress Report for Interferometer Alignment R&D - February 1995   |
| L952012-00-D | Peter Fritschel |                 | 3/16/95  | Monthly Report on the LSC Task, WBS 1.2.1.1.7 - February 1995  |
| L952013-00-M | David Shoemaker |                 | 2/15/95  | Statement of Work for FY 95 Detector Alignment Activities, dated 15 February 1995                          |
| L952013-00-U |                 |                 | 2/15/95  | Statement of Work (SOW) for FY95 Detector Alignment Activities   |
| L952014-00-U | Peter Fritschel |                 | 3/23/95  | Statement of Work (SOW) for FY95 Activities on the Detector Length Sensing/Control Subsystem               |
| L952015-00-U |                 |                 |          |  |
| L952016-00-A | David Shoemaker |                 | 5/3/95   | Purchase Requisition for Support to the MIT LIGO Effort  |
| L952017-00-A | David Shoemaker |                 | 4/5/95   | Acknowledgement of Application   |
| L952017-00-U |                 |                 |          |  |
| L952018-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952018-00-U |                 |                 |          |  |
| L952019-00-A | David Shoemaker |                 | 4/5/95   | Acknowledgement of Application   |
| L952019-00-U |                 |                 |          |  |
| L952020-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952020-00-U |                 |                 |          |  |
| L952021-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952021-00-U |                 |                 |          |  |
| L952022-00-A | David Shoemaker |                 | 4/5/95   | Acknowledgement of Application   |
| L952022-00-U |                 |                 |          |  |
| L952023-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952023-00-U |                 |                 |          |  |
| L952024-00-U |                 |                 |          |  |
| L952025-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952025-00-U |                 |                 |          |  |
| L952026-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952026-00-U |                 |                 |          |  |
| L952027-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |
| L952027-00-U |                 |                 |          |  |
| L952028-00-A | David Shoemaker |                 | 3/27/95  | Acknowledgement of Application   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt  | Full Title                     |
|--------------|-----------------|-----------------|---------|--------------------------------|
| L952028-00-U |                 |                 |         |                                |
| L952029-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952029-00-U |                 |                 |         |                                |
| L952030-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952031-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952032-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952033-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952034-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952035-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952036-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952036-00-U |                 |                 |         |                                |
| L952037-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952037-00-U |                 |                 |         |                                |
| L952038-00-A |                 |                 | 3/27/95 | Acknowledgement of Application |
| L952038-00-U |                 |                 |         |                                |
| L952039-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952040-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952041-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952042-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952043-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952044-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952045-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952046-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952047-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952048-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952049-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952050-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952051-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952052-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952053-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952054-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952055-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952056-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952057-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952058-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952059-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952060-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952061-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952062-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952063-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952064-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952065-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952066-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952067-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952068-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952069-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952070-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952071-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952072-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952072-00-U |                 |                 |         |                                |
| L952073-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952073-00-U |                 |                 |         |                                |
| L952074-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952074-00-U |                 |                 |         |                                |
| L952075-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952075-00-U |                 |                 |         |                                |
| L952076-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952076-00-U |                 |                 |         |                                |
| L952077-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952078-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952079-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952080-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952080-00-U |                 |                 |         |                                |
| L952081-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952081-00-U |                 |                 |         |                                |
| L952082-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952082-00-U |                 |                 |         |                                |
| L952083-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
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| L952084-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |
| L952084-00-U |                 |                 |         |                                |
| L952085-00-A | David Shoemaker |                 | 3/27/95 | Acknowledgement of Application |

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| L952085-00-U |                  |                 |         |   |
| L952086-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952087-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952088-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952089-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952090-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952093-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952094-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952095-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952096-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952097-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952098-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
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| L952099-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
| L952099-00-U |                  |                 |         |   |
| L952100-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
| L952100-00-U |                  |                 |         |   |
| L952101-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
| L952101-00-U |                  |                 |         |   |
| L952102-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
| L952102-00-U |                  |                 |         |   |
| L952103-00-A | David Shoemaker  |                 | 3/27/95 | Acknowledgement of Application  |
| L952103-00-U |                  |                 |         |   |
| L952104-00-U |                  |                 |         |   |
| L952105-00-A | Peter Fritschel  |                 | 4/7/95  | Progress Report for the Phase Noise Interferometer (PNI) - March 1995             |
| L952106-00-A | Nergis Mavalvala |                 | 4/10/95 | Progress Report for Interferometer Alignment R&D - March 1995                     |
| L952107-00-A | David Shoemaker  |                 | 4/11/95 | Progress Report for the ASC (Detector Alignment) Task, WBS 1.2.1.1.6 - March 1995 |
| L952108-00-U |                  |                 |         |   |
| L952109-00-A | David Shoemaker  |                 | 4/27/95 | Acknowledgement of Application  |
| L952109-00-U |                  |                 |         |   |
| L952110-00-U |                  |                 |         |   |
| L952111-00-U |                  |                 |         |   |
| L952112-00-U |                  |                 |         |   |
| L952113-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952114-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952115-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952116-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952117-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952118-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952119-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952120-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952121-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L952122-00-M | Rai Weiss        |                 | 6/6/95  | Transmittal of Background Materials for MIT Review                                |
| L960001-00-P | Syd Meshkov      |                 | 1/2/96  | Project Control Meeting Minutes for 27 December 1995                              |

| Document No  | Full Name        | ContractorDocNo     | Doc Dt   | Full Title  |
|--------------|------------------|---------------------|----------|---|
| L960002-00-A | Bernice Durand   |                     | 1/2/96   | Letter of Recommendation for Dennis Crossley  |
| L960003-00-A | Stan Whitcomb    |                     | 1/9/96   | Submittal of Manuscript by Abramovici et al   |
| L960003-00-M | Gary Sanders     |                     | 4/24/96  | Administrative Confidential   |
| L960003-02-V | Richard Bagley   | V049-2-009, Rev. P2 | 1/22/96  | Specification for Bakeout Blanket System  |
| L960004-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960005-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgment of Application   |
| L960005-00-P | Cindy Akutagawa  |                     | 2/15/96  | Allocation of Actual Costs - Detail Report, End of January 1996   |
| L960006-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgment of Application   |
| L960007-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgment of Application   |
| L960008-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960009-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960010-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960011-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgment of Application   |
| L960012-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960013-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960013-00-O | Mark Coles       |                     | 1/4/96   | Acknowledgement of Approval by LSU for Architecture Plans of LIGO Site                                      |
| L960014-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960015-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960016-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960017-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgement of Application  |
| L960018-00-A | Stan Whitcomb    |                     | 1/8/96   | Acknowledgment of Application   |
| L960019-00-F | Mark Coles       |                     | 1/4/96   | Trip Report - SLAC Visit on 20 December 1995  |
| L960019-00-F | Albert Lazzarini |                     | 1/4/96   | Trip Report - SLAC Visit on 20 December 1995  |
| L960019-00-F | Fred Raab        |                     | 1/4/96   | Trip Report - SLAC Visit on 20 December 1995  |
| L960019-00-F | Gerry Stapfer    |                     | 1/4/96   | Trip Report - SLAC Visit on 20 December 1995  |
| L960020-00-P | Syd Meshkov      |                     | 1/5/96   | Project Control Meeting Minutes for 3 January 1996  |
| L960021-00-F | Gerry Stapfer    |                     | 1/5/96   | Beam Tube Foundation Strategy   |
| L960022-00-M | Lew Allen        |                     | 1/5/96   | Report of LIGO Oversight Committee Meeting of 19 December 1995  |
| L960023-00-P | Linda Turner     |                     | 1/5/96   | Distribution of LIGO-C950572-02-O   |
| L960024-00-P | Phil Lindquist   |                     | 1/6/96   | 1995 Annual Report - DRAFT  |
| L960025-00-R | Stan Whitcomb    |                     | 1/9/96   | Prestabilized Laser for Professor Drever  |
| L960027-00-A | Stan Whitcomb    |                     | 1/10/96  | Acknowledgement of Application  |
| L960028-00-A | Stan Whitcomb    |                     | 1/10/96  | Acknowledgement of Application  |
| L960029-00-A | Stan Whitcomb    |                     | 1/10/96  | Acknowledgement of Application  |
| L960030-00-A | Stan Whitcomb    |                     | 1/12/96  | Acknowledgement of Invitation to Meeting on Gravitational Waves   |
| L960032-00-E | Dennis Coyne     |                     | 11/27/95 | DRAFT Release of Beam Tube (BT) - Vacuum Equipment (VE) Interface Control Document (ICD)                    |
| L960032-00-E | Albert Lazzarini |                     | 11/27/95 | DRAFT Release of Beam Tube (BT) - Vacuum Equipment (VE) Interface Control Document (ICD)                    |
| L960033-00-A | Stan Whitcomb    |                     | 12/28/95 | Applications for LIGO Science Positions   |
| L960034-00-E | Albert Lazzarini |                     | 1/9/96   | Meeting on Baffle Design Decision   |
| L960036-00-P | Hiro Yamamoto    |                     | 1/12/96  | CY 1996 Allocations for Deltas and TREX Accounts for Group CIT47  |
| L960037-00-P | Rirchard Fischer |                     | 1/11/96  | Project Control Meeting Minutes for 10 January 1996   |
| L960038-00-V | John Worden      |                     | 1/10/96  | Lease or Buy LN Tanks   |
| L960039-00-E | Albert Lazzarini |                     | 1/10/96  | Release of the Vacuum Equipment (VE) - Civil Construction (CC) Interface Control Document (ICD), Version 03 |
| L960039-00-E | Dennis Coyne     |                     | 1/10/96  | Release of the Vacuum Equipment (VE) - Civil Construction (CC) Interface Control Document (ICD), Version 03 |
| L960040-00-B | Larry Jones      |                     | 1/11/96  | Beam Tube Contract First Monthly Status Review (plus Recent Developments)                                   |
| L960041-00-P | Phil Lindquist   |                     | 1/29/96  | Change Request CR-960001, Facilities Monitoring and Control System  |
| L960042-00-V | John Worden      |                     | 1/12/96  | Meeting Held Friday, 12 January 1996, to Resolve Several Outstanding Vacuum Equipment Issues                |
| L960043-00-A | Stan Whitcomb    |                     | 1/16/96  | Acknowledgement of Application  |
| L960044-00-E | Betty Behnke     |                     | 1/15/96  | Distribution of Viewgraphs from Science and Integration Meeting of 11-12 December 1995                      |
| L960045-00-D | Lisa Sievers     |                     | 1/16/96  | Transmittal of Seismic Report (LIGO-C950572-02-D)   |
| L960046-00-P | Cindy Akutagawa  |                     | 1/16/96  | Labor Hour Reports - December 1995  |
| L960047-00-O | Rick Savage      |                     | 1/16/96  | Lightning Protection for the Beam Tube Enclosure (BTE)  |
| L960048-00-P | Barry Barish     |                     | 1/19/96  | Project Control Meeting Minutes for 17 January 1996   |
| L960048-00-P | Albert Lazzarini |                     | 1/19/96  | Project Control Meeting Minutes for 17 January 1996   |
| L960049-00-A | Stan Whitcomb    |                     | 1/19/96  | Acknowledgement of Application  |
| L960051-00-A | Gary Sanders     |                     | 1/24/96  | Jury Duty Exemption for Stan Whitcomb   |
| L960052-00-M | Barry Barish     |                     | 1/22/96  | Available Laser Equipment   |

| Document No  | Full Name            | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|----------------------|-----------------|----------|---|
| L960055-00-P | Phil Lindquist       |                 | 1/23/96  | Invoice #300161 for Telos Information Systems, P.O. PC157708  |
| L960057-00-M | Gary Sanders         |                 | 1/24/96  | Supporting Documentation for Request for Designation of the LIGO Project as an Economic Development Zone                              |
| L960058-00-D | Seiji Kawamura       |                 | 1/24/96  | Publication Request   |
| L960059-00-O | Mark Coles           |                 | 1/25/96  | Information about the LIGO Expansion Joints from Hyspan   |
| L960061-00-D | Garilynn Billingsley |                 | 1/25/96  | CSIRO Metrology Review Report, 15-16 January 1996   |
| L960062-00-A | Beth Moore           |                 | 1/26/96  | Administrative Confidential   |
| L960063-00-F | Bill Althouse        |                 | 1/23/96  | LIGO Facilities Schedule Review - 19 & 22 January 1996  |
| L960064-00-A |                      |                 | 12/19/95 | Rejection of Submitted Manuscript   |
| L960065-00-V | John Worden          |                 | 1/12/96  | Contract Changes with PSI   |
| L960066-00-P | Phil Lindquist       |                 | 1/29/96  | LIGO Change Control Board (CCB) Meeting Minutes for 26 January 1996   |
| L960067-00-M | Stan Whitcomb        |                 | 1/29/96  | Annual Progress Report for NSF Grant PHY95-03642  |
| L960068-00-B | Larry Jones          |                 | 1/30/96  | Plan for a Beam Tube and Enclosure Model at the Caltech Campus  |
| L960071-00-E | Albert Lazzarini     |                 | 2/6/96   | Computer Committee Meeting Minutes for 6 February 1996  |
| L960072-00-E | Albert Lazzarini     |                 | 2/8/96   | Draft Release of LIGO Beam Tube Baffles Science Requirements Document   |
| L960073-00-E | Stan Whitcomb        |                 | 2/13/96  | Minutes for the Integration Meeting on CDS Data Types, Rates, Formats, and Analysis Requirements                                      |
| L960073-00-E | Albert Lazzarini     |                 | 2/13/96  | Minutes for the Integration Meeting on CDS Data Types, Rates, Formats, and Analysis Requirements                                      |
| L960075-00-E | Albert Lazzarini     |                 | 3/5/96   | Transmittal of Integration Meeting Minutes  |
| L960076-00-E | Albert Lazzarini     |                 | 3/7/96   | Minutes of Meeting to Resolve the Need for Synchronous Motors in the Facilities, 5 March 1996   |
| L960080-00-M | John Schlue          |                 | 1/31/96  | Distribution of Revised JPL Task Plan for the Safety, Reliability and Quality Assurance Support for the LIGO Project                  |
| L960080-00-P | Phil Lindquist       |                 | 1/25/96  | Additional Information Requested Pertaining to the LIGO Project Work Plan, December 1995 - November 1995 (LIGO-M950049-00-M)          |
| L960081-00-P | Syd Meshkov          |                 | 1/30/96  | Project Control Meeting Minutes for 24 January 1996   |
| L960082-00-M | Robert L. Byer       |                 | 1/10/96  | Transmittal of Signed MOU between Galileo and LIGO  |
| L960083-00-P | Rita Torres          |                 | 1/31/96  | List of LIGO Contracts  |
| L960084-00-D | Stan Whitcomb        |                 | 2/2/96   | CDS Control and Monitoring DRR 22 February 1996   |
| L960085-00-D | Stan Whitcomb        |                 | 2/2/96   | Design Requirements Review (DRR) for the LIGO Core Optics Components (COC) Subsystem, 23 February 1996                                |
| L960086-00-F | Mark Coles           |                 | 1/31/96  | Trip Report - LIGO Livingston Site and LSU  |
| L960088-00-P | Phil Lindquist       |                 | 2/1/96   | Document Control Center (DCC) Database Development  |
| L960089-00-A | Stan Whitcomb        |                 | 2/2/96   | Acknowledgement of Application  |
| L960090-00-A | Stan Whitcomb        |                 | 2/2/96   | Acknowledgement of Application  |
| L960091-00-P | Syd Meshkov          |                 | 2/5/96   | Project Control Meeting Minutes for 31 January 1996   |
| L960092-00-P | Bill Althouse        |                 | 2/6/96   | LIGO Detector Schedule Review, 1 February 1996  |
| L960093-00-V | John Worden          |                 | 2/6/96   | PSI Contract Changes  |
| L960094-00-V | John Worden          |                 | 2/6/96   | Agreements and Commitments with PSI   |
| L960095-00-P | Phil Lindquist       |                 | 2/6/96   | LIGO Change Control Board Meeting, 9 February 1996  |
| L960096-00-P | Phil Lindquist       |                 | 2/7/96   | LIGO Project Signature Authority - Update   |
| L960097-00-O | Rick Savage          |                 | 2/6/96   | Transmittal of Alan Rohay's Final Report of Measurements at the Hanford Site and Preliminary Measurements Made at the Livingston Site |
| L960099-00-F | April Burke          |                 | 12/19/95 | Press Release for Contract Award to CBI   |
| L960100-00-A | Stan Whitcomb        |                 | 2/8/96   | Applications for LIGO Science Positions   |
| L960101-00-P | Phil Lindquist       |                 | 10/5/95  | Labor Changes for Selected LIGO Personnel   |
| L960102-00-A | Stan Whitcomb        |                 | 2/13/96  | Acknowledgement of Application  |
| L960103-00-P | Syd Meshkov          |                 | 2/13/96  | Project Control Meeting Minutes for 7 February 1996   |
| L960104-00-V | John Worden          |                 | 2/9/96   | February Monthly Status Meetings - PSI and CBI  |
| L960104-00-V | Larry Jones          |                 | 2/9/96   | February Monthly Status Meetings - PSI and CBI  |
| L960105-00-A | Stan Whitcomb        |                 | 2/13/96  | Administrative Confidential   |
| L960105-02-A | Stan Whitcomb        |                 | 3/14/96  | Administrative Confidential   |
| L960107-04-D | Garilynn Billingsley |                 | 4/15/96  | LIGO Large Optics Insurance Inventory   |
| L960108-00-P | Phil Lindquist       |                 | 2/13/96  | LIGO Change Control Board (CCB) Meeting Minutes for 9 February 1996   |
| L960110-00-P | Phil Lindquist       |                 | 2/15/95  | Memo from E. Freise re, Meeting with NSF on 8 February 1996   |
| L960111-00-F | Gary Sanders         |                 | 2/16/96  | Request for Meeting in Richland Area  |
| L960111-00-F | Otto Matherny        |                 | 2/16/96  | Request for Meeting in Richland Area  |
| L960111-00-F | Barry Barish         |                 | 2/16/96  | Request for Meeting in Richland Area  |
| L960111-00-F | Fred Raab            |                 | 2/16/96  | Request for Meeting in Richland Area  |
| L960112-00-D | Robert Spero         |                 | 2/19/96  | Core Optics Size Meeting Minutes for 4 January 1996   |
| L960126-00-M | Earl Friese          |                 | 2/13/96  | Meeting with NSF on 8 February 1996   |
| L960143-00-U | Bill Althouse        |                 | 3/15/96  | LIGO Beam Tube Modules Updated Design Review  |
| L960145-00-M | Beth Moore           |                 | 4/30/96  | Administrative Confidential   |
| L960151-00-O | Fred Asiri           |                 | 2/20/96  | Summary of Lightning Protection Working Session, February 16, 1996.   |

| Document No  | Full Name       | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|-----------------|-----------------|---------|---|
| L960152-00-O | Rick Savage     |                 | 2/19/96 | Summary of Lightning Protection Working Session, Friday, February 16th, 1:00 PM, LIGO SCR (352 WB)  |
| L960153-00-A | Jerry Burk      |                 | 2/21/96 | Administrative Confidential   |
| L960155-00-E | Dennis Coyne    |                 | 2/20/96 | Power Dissipation Increases for the Three Interferometer Configuration  |
| L960157-00-D | Robbie Vogt     |                 | 2/23/96 | International Collaboration to Develop Sapphire Test Masses for Laser Interferometer Gravitational Wave Astronomy   |
| L960158-00-D | Robbie Vogt     |                 | 2/23/96 | International Collaboration to Develop Sapphire Test Masses for Laser Interferometer Gravitational Wave Astronomy.  |
| L960159-00-D | Fred Raab       |                 | 2/23/96 | Science Education Opportunities for the Richland School District from the LIGO Project  |
| L960160-00-D | Fred Raab       |                 | 2/23/96 | Science Education Opportunities for Kennewick School District from the LIGO Project   |
| L960164-00-D | Fred Raab       |                 | 2/27/96 | Science Education Opportunities for WSU Tri-Cities from the LIGO Project  |
| L960165-00-D | Robbie Vogt     |                 | 2/27/96 | Letter of Interest of Possible Collaboration between VIRGO, LIGO and Australia for Use of Sapphire Test Masses in Laser Interferometer Gravitational Wave Detectors |
| L960166-00-P |                 |                 | 2/27/96 | Sample of Conflict of Interest Statement. from JPL  |
| L960168-00-A | Gary Sanders    |                 | 2/27/96 | Extension of Storage - Dennis Coyne   |
| L960170-00-A | Fred Raab       |                 | 2/28/96 | Relocation of Caltech Employees to Washington and Louisiana.  |
| L960171-00-U | Robbie Vogt     |                 | 2/29/96 | Surf 96 Project.  |
| L960173-00-P | Phil Lindquist  | 423599 (inv. #) | 3/1/96  | Distribution of MIT Costs Invoiced for August through December, 1995  |
| L960175-00-P | Phil Lindquist  | 423599 (INV #)  | 3/4/96  | Allocation of MIT Costs Invoiced through December, 1995   |
| L960176-00-M | Gary Sanders    |                 | 3/8/96  | LIGO Beam Tube Modules Updated Design Review.   |
| L960177-00-P | Syd Meshkov     |                 | 3/5/96  | Project Control Meeting Minutes for 28 February 1995.   |
| L960178-00-M | Beth Moore      |                 | 4/30/96 | Administrative Confidential   |
| L960179-00-M | Beth Moore      |                 | 4/30/96 | Administrative Confidential   |
| L960180-00-P | Phil Lindquist  |                 | 3/5/96  | LIGO Change Control Board (CCB) Meeting Minutes for 4 March 1996.   |
| L960181-00-A | I. Baldon       |                 | 3/5/95  | Overpayment on Previous Expense Reports.  |
| L960181-01-A | I. Baldon       |                 | 3/5/96  | Overpayment on Previous Expense Reports   |
| L960182-00-O | Ed Jasnow       |                 | 3/6/96  | Proposed General Provisions for Formally Advertised Construction Contracts  |
| L960183-00-A | Stan Whitcomb   |                 | 3/7/96  | Request of Money Transfer to Moscow State University from ISF GAP Grant   |
| L960186-00-M | Beth Moore      |                 | 4/30/96 | Administrative Confidential   |
| L960187-00-P | Syd Meshkov     |                 | 3/11/96 | Project Control Meeting Minutes for 6 March 1996  |
| L960188-00-V | John Worden     |                 | 3/8/96  | Agreements and Commitments with PSI   |
| L960191-00-E | Dennis Coyne    |                 | 3/11/96 | Comments on PSI's Equipment Power Requirements (V049-1-047, Rev. P1)  |
| L960192-00-V | John Worden     |                 | 3/13/96 | PSI Contract Changes in Response to Change Orders 12, 13, 16, 17, and 18  |
| L960193-00-P | Cindy Akutagawa |                 | 3/14/96 | Labor Hour Reports - End of February 1996   |
| L960194-00-P | Cindy Akutagawa |                 | 2/15/96 | Allocation of Actual Costs - Detail Report, End of January 1996   |
| L960195-00-D | Peter Holland   |                 | 4/3/96  | Manuscript Comments on "Improved Sensitivity in a Gravitational Wave Interferometer" (LIGO-P950011-02-R)  |
| L960196-00-A | Isaac Skelton   |                 | 2/28/96 | Income Tax Status on ISF with the Russian Federation  |
| L960197-01-E | Dennis Coyne    |                 | 3/18/96 | Proposed Additions to Nomenclature for Equipment within the Buildings, Revision 1   |
| L960199-00-P | Rita Torres     |                 | 3/14/96 | Duplicate Invoices from Butler Service Group, Inc.  |
| L960200-00-E | Dennis Coyne    |                 | 3/15/96 | Review of Drawings Related to the Facility Monitoring and Control System (FMCS)   |
| L960201-00-P | Phil Lindquist  |                 | 3/15/96 | LIGO Change Control Board (CCB) Meeting Minutes for 11 March 1996   |
| L960202-00-P | Phil Lindquist  |                 | 3/15/96 | Reconciliation of Funding and Expenditures by Fiscal Year   |
| L960203-00-A | Gary Sanders    |                 | 3/18/96 | Jury Duty Request for Fred Raab   |
| L960204-00-P | Phil Lindquist  |                 | 3/18/96 | LIGO Change Control Board Meeting - 19 March 1996   |
| L960205-00-A | Gary Sanders    |                 | 3/18/96 | Invitation to LIGO Contractor Design Reviews  |
| L960206-00-V | Mike Zucker     |                 | 3/18/96 | Relocation of Nozzles on HAM Chamber 84" and 60" Covers   |
| L960207-00-P | Syd Meshkov     |                 | 3/18/96 | Project Control Meeting Minutes for 13 March 1996   |
| L960208-00-E | Dennis Coyne    |                 | 3/18/96 | Vacuum Equipment Deliverables to the Beam Tube  |
| L960209-00-V | John Worden     |                 | 3/19/96 | Vacuum Control and Monitoring Systems Design Requirements Document  |
| L960210-00-P | Cindy Akutagawa |                 | 3/19/96 | Labor Changes for LIGO Personnel  |
| L960211-00-E | Dennis Coyne    |                 | 3/19/96 | Integrated Layout Drawings: Usage & Maintenance   |
| L960212-00-P | Ben Lucas       |                 | 3/19/96 | Beam Tube Enclosure (BTE) Lightning Protection  |
| L960213-00-P | Irena Petrac    |                 | 3/19/96 | Request for D&B Report on Lightwave Electronics Corp.   |
| L960215-00-E | Dennis Coyne    |                 | 3/20/96 | Minutes of the Integration Meeting of March 15, 1996  |
| L960216-00-M | T. Everhart     |                 | 2/1/96  | Letter of Appreciation  |
| L960217-00-M | Karl Drobny     |                 | 3/15/96 | Newspaper Article on LIGO in Hanford  |
| L960218-00-M |                 |                 | 3/14/96 | Newspaper Article re LIGO Project - Hanford   |
| L960219-00-E | E. Motts        | DQA #96-240     | 3/11/96 | Review of LIGO Sites Alignment Requirements Document (LIGO-E960010-00-E)  |
| L960220-00-M | Gary Sanders    |                 | 3/22/96 | Numbering and Archiving LIGO Talks  |
| L960221-00-D | Bill Kells      |                 | 3/22/96 | Gathering of High Precision Optical Metrology Data in the Form of Wyko 6000   |
| L960222-00-P | Stan Whitcomb   |                 | 3/22/96 | Evaluators' Comment Sheets for RFP KD 226   |

| Document No  | Full Name        | ContractorDocNo | Doc Dt  | Full Title  |
|--------------|------------------|-----------------|---------|---|
| L960223-00-B | Gerry Stapfer    |                 | 3/22/96 | Baffle Coating Risk Assessment  |
| L960224-00-V | Richard Bagley   |                 | 2/29/96 | LIGO Vacuum Equipment News Release  |
| L960225-00-M | J. Hough         |                 | 3/1/96  | Draft of Memorandum of Understanding (MOU) Between the German/British Collaboration for the Detection of Gravitational Waves (GEO 600) and the LIGO Project, March 1996 |
| L960226-00-P | Phil Lindquist   |                 | 3/28/96 | LIGO Amount Awarded and Amount Expended by Fiscal Year, NSF Award #PHY-9210038  |
| L960227-00-P | Phil Lindquist   |                 | 3/28/96 | LIGO Change Control Board (CCB) Meeting Minutes for 19 March 1996   |
| L960228-00-A | Beth Moore       |                 | 3/29/96 | Reviewers Documentation Package for NSF Review, 9-10 April 1996   |
| L960229-00-A | Gary Sanders     |                 | 3/29/96 | National Science Foundation Review of the LIGO Project - April 9-11, 1996   |
| L960230-00-A | I. Baldon        |                 | 3/29/96 | Reimbursement of Overpayment on Previous Expense Reports  |
| L960231-00-A | Beth Moore       |                 | 3/28/86 | Invitation to Attend the NSF Review on 9-10 April 1996  |
| L960232-00-P | Phil Lindquist   |                 | 3/29/96 | DRAFT Quarterly Report  |
| L960233-00-P | Syd Meshkov      |                 | 4/1/96  | Project Control Meeting Minutes for 27 March 1996   |
| L960235-00-D | Stan Whitcomb    |                 | 4/3/96  | Design Requirements Review (DRR) for the Length Sensing and Control (LSC) - 30 April 1996   |
| L960236-00-D | Stan Whitcomb    |                 | 4/3/96  | Design Requirements Review for the Seismic Isolation Subsystem (SEI) - 29 April 1996  |
| L960237-00-P | Bill Althouse    |                 | 4/1/96  | LIGO Document Change Notice (DCN)   |
| L960238-00-E | Hiro Yamamoto    |                 | 4/1/96  | Acknowledgement of Dr. Phung's Effort to Modify Optical Design Tool   |
| L960238-00-E | Albert Lazzarini |                 | 4/1/96  | Acknowledgement of Dr. Phung's Effort to Modify Optical Design Tool   |
| L960241-00-M | Barry Barish     |                 | 3/19/96 | Collaboration with University of Florida  |
| L960242-00-P | Phil Lindquist   |                 | 4/2/96  | LIGO Change Control Board Meeting - 3 April 1996  |
| L960243-00-P |                  |                 | 4/2/96  | Proposal Evaluation Report for the Procurement of Nd3+ Laser Design and Fabrication (LIGO-C960227-00-R)   |
| L960245-00-A | Barry Barish     |                 | 4/2/96  | Information on the LIGO Project   |
| L960245-00-A | Gary Sanders     |                 | 4/2/96  | Information on the LIGO Project   |
| L960246-00-P | Phil Lindquist   |                 | 4/2/96  | LIGO Change Control Board Meeting of 3 April 1996   |
| L960247-00-M |                  |                 | 3/20/96 | Senate Bill 6511 - Act Relating to Sales and Use Tax Exemptions for Materials Used in the Construction of LIGO  |
| L960251-00-P |                  | RFP KD226       | 4/2/96  | Memorandum of Telephone Request for Specific Cost Information - Lightwave Electronics Corp.   |
| L960252-00-P | Irena Petrac     |                 | 4/2/96  | Nd3+ Lasers - LIGO Procurement Proposal   |
| L960253-00-M | Gary Sanders     |                 | 3/20/96 | Document Transfers From Contractors to Contractors  |
| L960254-00-M | April Burke      |                 | 3/20/96 | Press Release re President Clinton's Request to Cut \$250 Million from Hanford Budget   |
| L960255-00-M | April Burke      |                 | 3/19/96 | Press Release in Tri-City Herald re Benefits of LIGO to Hanford Community   |
| L960256-00-E | Dennis Coyne     |                 | 4/2/96  | Release of the Detector (DET) - Civil Construction (CC) Interface Control Document (ICD)  |
| L960259-00-E | Betty Behnke     |                 | 4/4/96  | Release of Manuscript for the Moriond Workshop  |
| L960260-00-P | Irena Petrac     |                 | 4/4/96  | Conflict of Interest Signatures for Nd3+ Lasers Contract (LIGO-C960479-00-P)  |
| L960262-00-V | John Worden      |                 | 4/4/96  | Louisiana Midpoint Building Requirements  |
| L960264-00-P | Phil Lindquist   |                 | 4/8/96  | LIGO Change Control Board (CCB) Meeting Minutes - 3 April 1996  |
| L960265-00-A | Beth Moore       |                 | 4/9/96  | Reimbursement to Caltech/LIGO Project for Subsistence Costs   |
| L960266-00-P | Ed Jasnow        |                 | 4/8/96  | Construction Contract General Provisions  |
| L960267-00-P | Ed Jasnow        |                 | 4/9/96  | Lease Agreement Between the National Science Foundation (NSF) and Louisiana State University (LSU)  |
| L960269-00-D | Stan Whitcomb    |                 | 4/10/96 | Key Near-Term Detector Activities   |
| L960270-00-M | Barry Barish     |                 | 4/11/96 | Condolence to Parsons   |
| L960270-00-M | Gary Sanders     |                 | 4/11/96 | Condolence to Parsons   |
| L960270-00-M | Fred Asiri       |                 | 4/11/96 | Condolence to Parsons   |
| L960271-00-M | Barry Barish     |                 | 4/30/96 | Administrative Confidential   |
| L960272-00-P | Cindy Akutagawa  |                 | 4/12/96 | Allocation of Actual Costs - Detail Report, End of March 1996   |
| L960273-00-P | Cindy Akutagawa  |                 | 4/16/96 | Labor Hour Reports, End of March 1996   |
| L960275-00-A | Beth Moore       |                 | 4/11/96 | Subsistence Costs-Monies Collected for NSF Review   |
| L960276-00-V | John Worden      |                 | 4/12/96 | Agreements and Commitments With PSI   |
| L960280-00-E | Dennis Coyne     |                 | 4/16/96 | Requirements for the Louisiana Mid-Station Building   |
| L960281-00-P | Earl Friese      |                 | 4/17/96 | Request for Approval, Proposed Contract for Baffle Coating  |
| L960281-00-P | Ed Jasnow        |                 | 4/17/96 | Request for Approval, Proposed Contract for Baffle Coating  |
| L960282-00-P | Rirchard Fischer |                 | 4/17/96 | Minutes - Project Control Meeting, April 17, 1996.  |
| L960283-00-P | Phil Lindquist   |                 | 4/17/96 | LIGO Procurement Process - Analysis.  |
| L960284-00-V | Bill Althouse    |                 | 4/18/96 | Meeting With Paul Hendry, PSI Project Controls Manager.   |
| L960285-00-D | Barry Barish     |                 | 4/26/96 | Offer of Appointment  |
| L960285-00-D | Stan Whitcomb    |                 | 4/26/96 | Offer of Appointment  |
| L960286-00-B | Bill Althouse    |                 | 4/19/96 | LIGO Beam Tube Modules Updated Design Review - DRAFT Report   |
| L960287-00-M | Gary Sanders     |                 | 4/19/96 | Viewgraphs on the LIGO Project  |
| L960289-00-A | Kelly Cohen      |                 | 4/19/96 | TOPS Volume Author Kit  |
| L960290-00-M | Gary Sanders     |                 | 4/22/96 | Administrative Confidential   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|-------------------------|-----------------|---------|--|
| L960291-00-M | Gary Sanders            |                 | 4/22/96 | Administrative Confidential  |
| L960292-00-M | Gary Sanders            |                 | 4/22/96 | Administrative Confidential  |
| L960293-00-M | Gary Sanders            |                 | 4/24/96 | Submission of Revised LIGO Project Management Plan (LIGO-M950001-B-M)  |
| L960294-00-E | Dennis Coyne            |                 | 4/22/96 | Review Board Charter for the Vacuum Control and Monitoring System (VCMS) Design Requirements Review (DRR)  |
| L960295-00-E | William Young           |                 | 4/22/96 | Minutes of Second EMI Control Plan Meeting, Friday April 19, 1996  |
| L960296-00-D | Stan Whitcomb           |                 | 4/23/96 | Revised Manuscript "Improved Sensitivity in a Gravitational Wave Interferometer"   |
| L960298-00-B | Tom Eagar               |                 | 4/23/96 | Review and Edits for Design Review Report on Beam Tube Modules   |
| L960300-00-B | Cecil Franklin          |                 | 4/23/96 | Projected Schedule for Oven Unloading  |
| L960302-00-P | Phil Lindquist          |                 | 4/25/96 | LIGO Change Control Board Meeting - 04/26/96   |
| L960303-00-M | Graham H. Fernald, Esq. |                 | 4/25/96 | Sales Tax in Washington  |
| L960304-00-D | David Shoemaker         |                 | 4/25/96 | Information on the UN/European Space Agency Workshop on Basic Space Science  |
| L960305-00-D | David Shoemaker         |                 | 4/25/96 | Seismic Isolation System DRR   |
| L960306-00-D | David Shoemaker         |                 | 4/25/96 | Length Sensing/Control DRR   |
| L960307-00-V | Gary Sanders            |                 | 4/25/96 | LIGO Vacuum Equipment Final Design Review  |
| L960310-00-B | Bill Althouse           |                 | 4/26/96 | Transmittal of LIGO Beam Tube Modules Updated Design Review - DRAFT Report   |
| L960311-00-P | Phil Lindquist          |                 | 4/29/96 | LIGO Change Control Board (CCB) Meeting Minutes for 26 April 1996  |
| L960312-00-P | Phil Lindquist          |                 | 4/29/96 | Disposition of Technical Change Proposal TC-960001 - Lightning Protection  |
| L960313-00-M | Beth Moore              |                 | 4/29/96 | Administrative Confidential  |
| L960314-00-E | Albert Lazzarini        |                 | 5/1/96  | Meeting Between Virgo and LIGO on the Use of Common Data Formats and Access to Data  |
| L960315-00-P | Ben Lucas               |                 | 4/25/96 | Baseline Eye Checks  |
| L960316-00-D | Peter Fritschel         |                 | 5/1/96  | Layout of Chambers and Stack Mounting Plates in the Corner Station   |
| L960317-00-P | Richard Kithil          |                 | 5/1/96  | Lightning Season   |
| L960318-00-A | Gary Sanders            |                 | 5/1/96  | Relocation of LIGO Personnel Out of State  |
| L960319-00-P | William Morrison        |                 | 5/1/96  | Information on Laser Safety Containment Systems  |
| L960320-00-A | Jim Piper               |                 | 7/1/96  | Invitation to attend the IQEC'96 VIP Function, Tuesday 16 July, 6:45 pm  |
| L960323-00-A | John Marquette          |                 | 5/1/96  | Offsite Purchasing Process   |
| L960324-00-A | Joan Boughan            | PP045667        | 6/4/96  | Request for Foreign Travel Approval  |
| L960325-00-O | Aaron R. Asrael         |                 | 2/23/96 | Approval of Change Order With Acme Subcontract   |
| L960326-00-O | Mark Coles              |                 | 2/12/96 | Walker Airport Commission  |
| L960327-00-M | Harry Ward              |                 | 2/20/96 | Information on LISA Presentation   |
| L960328-00-B | Warren A. Carpenter     | 953571          | 2/13/96 | File #11.12.1 Preliminary of Pump Port Hardware Interface Control Document and RFI #11 for Review  |
| L960331-02-D | Seiji Kawamura          |                 | 5/14/96 | Settlement of SUS Action Items   |
| L960332-00-B | Bill Althouse           |                 | 5/6/96  | Discussion of Beam Tube Technical Risks and "Minibake" Options   |
| L960333-00-B | Bill Althouse           |                 | 5/6/96  | Report on the LIGO Beam Tube Modules Updated Design Review   |
| L960334-00-M | Sandy Pool              |                 | 5/2/96  | Notification of NSF on LIGO Lease Agreement Interpretation   |
| L960335-00-P | Syd Meshkov             |                 | 5/6/96  | Project Control Meeting Minutes for 1 May 1996   |
| L960336-00-P | Irena Petrac            |                 | 5/3/96  | Input for NSF Report   |
| L960337-00-F | Gerry Stapfer           |                 | 5/6/96  | Draft FDR Report   |
| L960338-00-M | Lew Allen               |                 | 6/6/96  | LIGO Oversight Committee Meeting Agenda for 14 May 1996  |
| L960339-A-E  | Albert Lazzarini        |                 | 5/9/96  | Outcome of the Integration Meeting, 3 May 1996   |
| L960340-00-D | Seiji Kawamura          |                 | 5/6/96  | Material of Watch Spring   |
| L960341-00-D | Daniel Sigg             |                 | 3/4/96  | ISC Meeting  |
| L960342-00-M | Tanya Erdmann           |                 | 2/23/96 | Request for Additional Information on Grant for Bruce Allen at University of Wisconsin   |
| L960343-00-P | E. Motts                |                 | 3/4/96  | Proposed Quality Assurance (QA) Support for LIGO Detector Optics   |
| L960344-00-M | Dr. David Berley        |                 | 3/5/96  | NSF Response to Downsizing of the LIGO Buildings   |
| L960345-00-O | Bruce Pottorf           |                 | 3/15/96 | Clark Report Construction Job Posting for Hanford Site   |
| L960346-00-B | Larry Jones             |                 | 5/6/96  | Edits for Memo re. Feasibility Study to Resistance Weld LIGO Baffles   |
| L960348-00-P | Bill Althouse           |                 | 5/8/96  | LIGO Coordinate Names and Reference Designations - CAUTION   |
| L960352-00-P | Phil Lindquist          |                 | 5/9/96  | NIST Contract Change Order #3  |
| L960357-00-D | Peter Holland           | HO-992          | 3/5/96  | Manuscript Acceptance for Publication Letter   |
| L960359-00-M | Phil Lindquist          |                 | 5/10/96 | Change Orders/Modifications to NSF-Approved Subcontracts   |
| L960360-00-F | Mark Coles              |                 | 5/13/96 | Report on the Facilities Final Design Review   |
| L960360-00-F | Gerry Stapfer           |                 | 5/13/96 | Report on the Facilities Final Design Review   |
| L960362-00-P | Syd Meshkov             |                 | 5/13/96 | Project Control Meeting Minutes, 8 May 1996  |
| L960363-01-E | Dennis Coyne            |                 | 6/5/96  | Estimated Hanford Site Electrical Transformer Loads  |
| L960365-00-M | John F. McDermott       | 4312/32802      | 5/10/96 | Sales Tax Exemption Request for California Institute of Technology as Grantee of National Science Foundation for the LIGO Project in Livingston, Louisiana |
| L960370-01-E | Dennis Coyne            |                 | 6/5/96  | Calculation/Design Check of the Alternative BT Guided Support Design   |

| Document No  | Full Name            | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|----------------------|-----------------|---------|--|
| L960371-00-P | Cindy Akutagawa      |                 | 5/16/96 | Allocation of Actual Costs - Detail Report, End of April 1996.                             |
| L960372-00-P | Rita Torres          |                 | 5/17/96 | Plan Holders List  |
| L960373-00-D | Edith Mshila         |                 | 5/13/96 | Magnetics Information  |
| L960374-00-M | Dr. David Berley     |                 | 5/13/96 | Report of the Committee to Review the MIT Component of Ligo                                |
| L960375-00-P | Cecil Franklin       |                 | 5/10/96 | Trip Report CBI Coupon Out Gassing Test on 5/10/96   |
| L960376-00-P |                      |                 | 5/29/96 | Refer to LIGO-C961580-00-O (L960376 is an incorrect number)                                |
| L960377-00-A | Robbie Vogt          |                 | 5/21/96 | Logistics for Undergraduates, Summer 1996.   |
| L960377-00-D | Robbie Vogt          |                 | 5/21/96 | Logistics for Undergraduates, Summer '96   |
| L960379-00-M | Dr. David Berley     |                 | 4/17/96 | Request for LIGO Research Panel from NSF   |
| L960380-00-B | Larry Jones          |                 | 4/24/96 | Weekly PC Viewgraphs - Beam Tube   |
| L960381-00-D | Curt Hovator         |                 | 5/21/96 | Injection Seeded Tri-Sapphire Laser.   |
| L960382-00-P | Cindy Akutagawa      |                 | 5/21/96 | Labor Hour Reports - End of April 1996.  |
| L960383-00-M | Lew Allen            |                 | 6/10/96 | Report of LIGO Oversight Committee Meeting held 14 May 1996                                |
| L960384-00-A | Margot Bremner       |                 | 5/20/96 | Promotion To Academic Level D(Reader)  |
| L960385-00-D | Alex Zibold          |                 | 5/23/96 | Beam Splitters   |
| L960386-00-D | Alex Zibold          |                 | 5/22/96 | Measurements With the 50 um BMS, NSS=425   |
| L960387-00-P | Syd Meshkov          |                 | 5/28/96 | Project Control Meeting Minutes for 15 May 1996  |
| L960388-00-E | Albert Lazzarini     |                 | 5/29/96 | IBM Shared University Research Program Pre-proposal  |
| L960388-00-E | Kent Blackburn       |                 | 5/29/96 | IBM Shared University Research Program Pre-proposal  |
| L960389-00-P | Phil Lindquist       | Inv.#332732     | 5/28/96 | Allocation of MIT Costs Invoiced Through April 1996  |
| L960391-A-E  | Albert Lazzarini     |                 | 5/29/96 | Paper for Internal Review Prior to Publication   |
| L960392-00-E | Dennis Coyne         |                 | 5/28/96 | Review Board Charter and Document Transmittal for the Suspension Preliminary Design Review |
| L960393-00-D | Stan Whitcomb        |                 | 6/1/96  | Letter of Recommendation   |
| L960394-00-E | Kent Blackburn       |                 | 5/30/96 | Pre-Proposal with IBM Shared University Research (SUR)                                     |
| L960395-00-F | Cecil Franklin       |                 | 5/23/96 | Trip Report Coil Material Bake-out   |
| L960396-00-M | Dr. David Berley     |                 | 5/13/96 | Transmittal of NSF Review Report for MIT Component of the LIGO Project                     |
| L960397-00-M | Don Hartill          |                 | 5/7/96  | Transmittal of Final NSF Review for MIT Component of LIGO                                  |
| L960398-00-M | Thomas Kirk          |                 | 5/3/96  | Transmittal of Final NSF Review Report for LIGO  |
| L960399-00-M | Dr. David Berley     |                 | 5/13/96 | Transmittal of Final NSF Review Report   |
| L960401-00-M | Donna Tomlison       |                 | 5/18/96 | L.A. Cellular Billing Statement  |
| L960402-00-D |                      |                 | 5/30/96 | Wire with an Extremely High Quality Factor   |
| L960403-00-P | Ed Jasnow            |                 | 6/5/96  | Washington Sales Tax Exemption, State Senate Bill 6511                                     |
| L960404-00-P | Ed Jasnow            |                 | 6/5/96  | Washington Sales Tax Exemption, State Senate Bill 6511                                     |
| L960405-00-P | Ed Jasnow            |                 | 6/5/96  | Washington Sales Tax Exemption, State Senate Bill 6511                                     |
| L960406-00-P | Ed Jasnow            |                 | 6/5/96  | Rights in Data Clause for Subcontracts   |
| L960407-00-A | Gary Sanders         |                 | 5/30/96 | LIGO Mailing List  |
| L960408-00-C | Rolf Bork            |                 | 6/3/96  | CDS Group Staffing Plan and Site Development   |
| L960409-00-D | Bill Althouse        |                 | 6/3/96  | SEI DRR Review Board Report  |
| L960410-00-M | Dr. David Berley     |                 | 5/23/96 | Panel on the Future Use of LIGO  |
| L960411-00-M | Ben Lucas            |                 | 6/4/96  | Statement of Work (SOW) for LIGO Safety Support Contract                                   |
| L960412-00-M | Ben Lucas            |                 | 6/4/96  | Procurement, Services of Dr. John R. Orr   |
| L960413-00-A | Beth Moore           |                 | 6/4/96  | LIGO Project Contractors   |
| L960414-00-P | Ben Lucas            |                 | 6/4/96  | Laser Eye Examinations for Laser Safety Program  |
| L960415-00-D | Stan Whitcomb        |                 | 6/6/96  | Assignment of CDS Control and Monitoring DRR Action Items                                  |
| L960418-00-B | Larry Jones          |                 | 5/16/96 | CBI Schedule from 5/16/96  |
| L960419-00-D | Alex Zibold          |                 | 6/5/96  | Photon Energy Calculations   |
| L960422-00-M |                      |                 | 5/24/96 | Galileo Response to the Review Panel Report.   |
| L960423-00-E | G. Gonzalez          |                 | 6/6/96  | SUS PDR/RFA (Recommendation for Action)  |
| L960425-00-E | William Young        |                 | 6/10/96 | Draft LIGO EMC/EMI Control Plan and Procedures   |
| L960426-00-F | Cecil Franklin       |                 | 6/11/96 | Trip Report - Coil Material Bake-Out Metlab, Philadelphia - 3-5 June 1996                  |
| L960427-00-V | Bill Althouse        |                 | 6/10/96 | LIGO Vacuum Equipment Final Design Review - DRAFT REPORT                                   |
| L960428-00-P | Syd Meshkov          |                 | 6/10/96 | Project Control Meeting Minutes for 5 June 1996  |
| L960429-00-P | Ed Jasnow            |                 | 6/10/96 | Refer to LIGO-C961579-00-O (L960429-00-P is an incorrect number)                           |
| L960431-00-D | Garilynn Billingsley |                 | 6/12/96 | LIGO Material Specifications   |
| L960432-00-E | Milena Krasich       |                 | 6/12/96 | Draft LIGO Reliability Program Plan  |
| L960433-00-D | Stan Whitcomb        |                 | 6/13/96 | Assignment of Core Optics Components DRR Action Items                                      |
| L960435-00-P | Cindy Akutagawa      |                 | 6/13/96 | Allocation of Actual Costs - Detail Report, End of May 1996                                |



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| L960436-00-V | John Worden                 |                 | 6/13/96 | Agreements and Commitments with PSI  |
| L960438-00-D | Dennis Coyne                |                 | 6/14/96 | Physical Constraints on the Placement and Integration of the Support Structure of the Seismic Isolation System (SIS)   |
| L960439-00-M | Barry Barish                |                 | 6/15/96 | Preparation for Formal Proposal for an Advanced R&D Program for Submission to NSF                                      |
| L960440-00-M | National Science Foundation |                 | 6/17/96 | NSF Active Grants in Gravitational Physics, FY1995 Annual Rates  |
| L960441-00-P | Syd Meshkov                 |                 | 6/17/96 | Project Control Meeting Minutes for 12 June 1996   |
| L960443-00-M | Gwendolyn Lytle             |                 | 6/13/96 | Administrative Confidential  |
| L960444-00-M | Bruce Allen                 |                 | 6/18/96 | Administrative Confidential  |
| L960445-00-A | Beth Moore                  |                 | 6/20/96 | Information on the LIGO Project.   |
| L960446-00-O | Dianna Krueger              |                 | 6/7/96  | List of Transferred Furniture from SSC   |
| L960447-00-D | Kelly Cohen                 |                 | 6/13/96 | Requirements for LIGO Optics and Their Realization   |
| L960448-00-P | Richard Kithil              |                 | 6/15/96 | CLSP Logistics Information   |
| L960450-00-M | Dr. David Berley            |                 | 6/20/96 | Notification of Review of Program Proposal for Support of LIGO Research - LIGO Visitors Program Proposal, PHY-9603177  |
| L960451-00-P | Phil Lindquist              |                 | 6/24/96 | DRAFT Quarterly Report for Review and Comments   |
| L960452-00-A | David Shoemaker             |                 | 6/19/96 | Consolidated Salary Expense Analysis   |
| L960453-00-P | Syd Meshkov                 |                 | 6/24/96 | Project Control Meeting Minutes for June 19, 1996.   |
| L960454-00-A | Jerry J. Perez              |                 | 6/4/96  | Travel Expenses  |
| L960456-00-D | Inge Kabert                 |                 | 6/24/96 | Dielectric Mirror  |
| L960457-00-M | Earl Friese                 |                 | 6/5/96  | New Proposal Entitled: LIGO Visitors Program Proposal.   |
| L960458-00-D | Stan Whitcomb               |                 | 7/22/96 | Transfer of Equipment to Moscow State University (MSU)   |
| L960461-00-B | Lance Buboltz               |                 | 6/21/96 | Article for Port of Pasco Newsletter(Revised)  |
| L960463-00-P | Ed Jasnow                   |                 | 6/25/96 | Liquid Nitrogen Dewars   |
| L960474-00-E | Dennis Coyne                |                 | 7/22/96 | BSC Chamber Shell Breathing Deflections Under Vacuum Loads   |
| L960511-02-D |                             |                 | 5/17/96 | Amendment to CSIRO Final Report  |
| L960526-00-P | Bill Althouse               |                 | 7/25/96 | LIGO Technical Board Meeting Minutes for 22 July 1996  |
| L960528-00-D | Stan Whitcomb               |                 | 7/1/96  | Assignment of Length Sensing and Control DRR Action Items  |
| L960529-00-D | Stan Whitcomb               |                 | 7/1/96  | Assignment of Seismic Isolation DRR Action Items   |
| L960530-00-D | Stan Whitcomb               |                 | 7/22/96 | Transfer of Equipment to Moscow State University (MSU)   |
| L960531-00-M | Fred Raab                   |                 | 3/15/96 | Letter to Benton County.   |
| L960532-00-D | Ruth Borgeson Everett       |                 | 3/26/96 | Notice of Financial Support From International Science Foundation (ISF)  |
| L960537-00-M | C. Canizares                |                 | 5/22/96 | NSF Review of MIT Component of LIGO Project  |
| L960539-00-A | David Shoemaker             |                 | 6/26/96 | Update on Employee Benefit Rates   |
| L960541-00-M | Gary Sanders                |                 | 6/27/96 | New Weekly Time for Project Control Meetings and Weekly Reports  |
| L960543-00-M | Phil Lindquist              |                 | 6/28/96 | Administrative Confidential  |
| L960544-00-M | Gary Sanders                |                 | 6/28/96 | Relocation Travel Reimbursement.   |
| L960545-00-A | Beth Moore                  |                 | 6/28/96 | LIGO Project Telephone Extensions - Switches   |
| L960547-00-B | Larry Jones                 |                 | 6/24/96 | Beam Tube Viewgraphs   |
| L960548-00-B | Lance Buboltz               |                 | 6/21/96 | Article for Port of Pasco Newsletter   |
| L960549-00-P | Phil Lindquist              |                 | 6/28/96 | Allocation of MIT Costs Invoiced through May 1996  |
| L960550-00-F | Mark Coles                  |                 | 7/1/96  | Trip Report - LIGO Outreach Program in Louisiana   |
| L960551-00-P | Phil Lindquist              |                 | 7/1/96  | LIGO Change Control Board Meeting - 8 July 1996  |
| L960551-A-P  | Phil Lindquist              |                 | 7/2/96  | LIGO Change Control Board Meeting - July 8, 1996.  |
| L960554-00-A | Beth Moore                  |                 | 7/3/96  | Undergraduate Wage Rates for Academic Year 1996/1997.  |
| L960555-00-P | Syd Meshkov                 |                 | 7/3/96  | Project Control Meeting Minutes for June 26, 1996.   |
| L960557-00-F | Gerry Stapfer               |                 | 7/2/96  | Information Regarding the Industry Briefing  |
| L960558-00-M | April Burke                 |                 | 6/21/96 | Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Bill, 1997  |
| L960563-00-O | Rita A. Heldenbrand         |                 | 7/10/96 | Letter From Spokane Construction Council.  |
| L960568-00-P | Syd Meshkov                 |                 | 7/12/96 | Project Control Meeting Minutes for 8 July 1996  |
| L960569-00-M |                             |                 | 6/15/96 | Response to April 9-11, 1996 NSF Review Report.  |
| L960569-00-P | Phil Lindquist              |                 | 7/15/96 | Response to 9-11 April 1996 NSF Review Report  |
| L960574-00-P | Cindy Akutagawa             |                 | 7/17/96 | Labor Hour Reports - End of June 1996  |
| L960578-00-M | Robert L. Byer              |                 | 1/10/96 | Transmittal of the Memorandum of Understanding(MOU) Between Galileo and LIGO   |
| L960579-00-P | Aaron R. Asrael             |                 | 7/5/96  | National Science Foundation Authorization for NIST Amendment   |
| L960580-00-F | Debasish Mukherjee          |                 | 7/10/96 | Letter Regarding Interest in Participating in the Vacuum Buildup and Laser Health Physics Portions of the LIGO Project |
| L960582-00-B | Larry Jones                 |                 | 7/17/96 | RGA Information  |
| L960584-00-P | Syd Meshkov                 |                 | 7/22/96 | Project Control Meeting Minutes for 15 July 1996   |
| L960585-00-M | Marty Garcia                |                 | 7/23/96 | Delayed Relocation of Gary H. Sanders  |
| L960587-00-P | Phil Lindquist              |                 | 7/23/96 | LIGO Change Control Board Meeting, 25 July 1996  |

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| L960590-00-M | Gary Sanders            |                 | 7/25/96  | Administrative Confidential  |
| L960591-00-M | Gary Sanders            |                 | 7/25/96  | Administrative Confidential  |
| L960592-00-A | Kent Blackburn          |                 | 7/24/96  | Full System Backup Data Tapes  |
| L960593-00-F | Mark Coles              |                 | 7/25/96  | Thank You Letter   |
| L969975-00-E | Albert Lazzarini        |                 | 3/5/96   | Transmittal of L950073-00-E  |
| M890001-00-M | Robbie Vogt             |                 | 12/1/89  | Proposal to the NSF for a LIGO   |
| M900046-01-F |                         |                 | 9/8/95   | LIGO Project System Safety Management Plan, DRAFT  |
| M900046-02-F |                         |                 | 9/15/95  | LIGO Project System Safety Management Plan, DRAFT  |
| M900046-03-F |                         |                 | 9/29/95  | LIGO Project System Safety Management Plan, DRAFT  |
| M900046-04-F | Ben Lucas               |                 | 10/6/95  | PROJECT SYSTEM SAFETY PLAN COMPLETED, DRAFT, Version 4   |
| M930001-00-M |                         |                 | 8/26/93  | Memorandum of Understanding (MOU) between NSF and the DOE for the Sitting, Construction, Operation, and Disposition of the Laser Interferometer Gravitational-Wave Observatory (LIGO) at Hanford |
| M940001-00-M | Phil Lindquist          |                 | 12/16/94 | LIGO Project Signature Authority   |
| M940002-00-P | Barry Barish            |                 | 9/1/94   | Quarterly Report for NSF Cooperative Agreement #PHY-9210038  |
| M940003-00-M | Phil Lindquist          |                 | 12/19/94 | LIGO Project Travel Policy   |
| M940004-00-M | Barry Barish            |                 | 12/22/94 | Annual Work Plan - FY95  |
| M940005-0B-D |                         |                 | 1/1/94   | LIGO Detector Construction Phase Implementation Plan, Rev. B   |
| M940005-B-D  | McMaster-Carr Supp. Co. |                 |          |  |
| M940006-00-P |                         |                 | 9/1/94   | LIGO Cost Book   |
| M940007-00-M |                         |                 | 10/27/94 | Baseline-1, DRAFT (old #LIGO-1001055)  |
| M940008-00-P |                         |                 | 9/1/94   | LIGO Summary Book  |
| M940009-00-M | Gary Sanders            |                 | 9/12/94  | LIGO Cost Estimating Plan, DRAFT (old LIGO #1001058)   |
| M940010-00-M |                         |                 | 11/14/94 | LIGO Cost and Schedule Summary - Operations, dated November 1994   |
| M940011-00-M | Gary Sanders            |                 | 11/1/94  | A LIGO Science Education Program, DRAFT  |
| M940012-00-R | McMaster-Carr Supp. Co. |                 | 9/12/94  |  |
| M940013-00-M | NSF Review Committee    |                 | 10/11/94 | Review of the Cost, Schedule and Management of the LIGO for the NSF  |
| M950001-13-M |                         |                 | 2/1/95   | LIGO Project Management Plan, DRAFT, Revision B  |
| M950001-A-M  | Gary Sanders            |                 | 10/1/95  | LIGO Project Management Plan, Revision A, dated October 1995   |
| M950001-B-M  | Gary Sanders            |                 | 4/1/96   | LIGO Project Management Plan, Revision B, dated April 1996   |
| M950002-00-P | Linda Turner            |                 | 2/15/95  | CDRL Numbering Scheme  |
| M950003-00-P | Phil Lindquist          |                 | 1/1/95   | Annual Report 1994 for NSF Cooperative Agreement #PHY-9210038  |
| M950003-00-U |                         |                 | 10/30/95 |  |
| M950004-00-P | Phil Lindquist          |                 | 2/2/95   | LIGO Project Monthly Progress Report, December 1994  |
| M950005-00-P | Phil Lindquist          |                 | 2/3/95   | LIGO Configuration Management Plan   |
| M950006-00-P | Linda Turner            |                 | 2/15/95  | LIGO Start-Up Procedures for Incoming and Outgoing Documentation   |
| M950007-00-M | Phil Lindquist          |                 | 2/22/95  | LIGO Project Monthly Progress Report, January 1995   |
| M950007-04-P | Felix Fernandez         |                 | 6/15/96  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End May 1996.   |
| M950008-00-D | Robbie Vogt             |                 | 1/23/95  | CES Project Control  |
| M950009-00-U | Aaron R. Asrael         |                 | 2/27/95  | Notice of increased funding for LIGO   |
| M950010-00-O | A. Eisenstadt           |                 | 3/2/95   | Federal Register notice requesting comments on the LIGO Louisiana EA   |
| M950011-00-P | Phil Lindquist          |                 | 3/28/95  | Quarterly Report for NSF Cooperative Agreement #PHY-9210038, DRAFT   |
| M950011-A-P  | Phil Lindquist          |                 | 3/29/95  | Quarterly Report for NSF Cooperative Agreement #PHY-9210038, FINAL   |
| M950012-00-P |                         |                 | 3/28/95  | Monthly Progress Report - February 1995, DRAFT   |
| M950013-00-P | Linda Turner            |                 | 3/30/95  | Document Flow with The Ralph M. Parsons Company  |
| M950014-02-U | Rick Savage             |                 | 2/3/95   | Core Optics Components FY 95 Statement of Work   |
| M950014-03-U | Rick Savage             |                 | 2/3/95   | Core Optics Components FY 95 Statement of Work   |
| M950015-00-P | Linda Turner            |                 | 4/20/95  | Electronic Filing into the Document Control Center (DCC)   |
| M950016-00-P | Phil Lindquist          |                 | 4/24/95  | Draft Monthly Progress Report (end of March 1995)  |
| M950017-00-P | Phil Lindquist          |                 | 4/24/95  | Actual Costs and Commitments through March 1995, Table   |
| M950018-00-P | Phil Lindquist          |                 | 5/8/95   | Work Breakdown Structure Dictionary, DRAFT   |
| M950019-00-M | Gary Sanders            |                 |          | Memorandum of Understanding Between Caltech Relativity Theory Group and LIGO   |
| M950020-00-M | Gary Sanders            |                 | 5/11/95  | LIGO Operations, 1997-2001   |
| M950021-00-M | Rirchard Fischer        |                 | 5/11/95  | LIGO Project Management Control System Description   |
| M950022-00-D | Bill Althouse           |                 | 5/10/95  | LIGO Detector Group - Prestabilized Laser Subsystem Documentation Package  |
| M950023-00-R |                         |                 | 5/11/95  | LIGO R&D Group - R&D Highlights  |
| M950024-00-P | Phil Lindquist          |                 | 6/1/95   | Monthly Progress Report, April 1995  |
| M950025-00-M | Gary Sanders            |                 | 6/1/95   |  |
| M950025-00-U | Gary Sanders            |                 |          |  |

| Document No  | Full Name                     | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|-------------------------------|-----------------|----------|---|
| M950026-00-U | Gary Sanders                  |                 |          |   |
| M950027-00-M | Phil Lindquist                |                 |          |   |
| M950028-00-P | Phil Lindquist                |                 | 6/22/95  | LIGO Project Quarterly Status Report  |
| M950029-00-M | Gary Sanders                  |                 | 6/29/95  |   |
| M950030-00-M | McMaster-Carr Supp. Co.       |                 | 6/8/95   |   |
| M950031-00-M | McMaster-Carr Supp. Co.       |                 | 2/9/95   |   |
| M950032-A-D  | Robbie Vogt                   |                 | 2/2/95   |   |
| M950033-00-P | McMaster-Carr Supp. Co.       |                 | 3/1/95   |   |
| M950034-00-P | McMaster-Carr Supp. Co.       |                 | 3/1/95   |   |
| M950035-00-P | McMaster-Carr Supp. Co.       |                 | 3/1/95   |   |
| M950036-00-P | Phil Lindquist                |                 | 7/20/95  | Monthly Progress Report, June 1995  |
| M950037-00-M | Gary Sanders                  |                 | 7/26/95  | Memorandum of Understanding between University of Colorado and LIGO   |
| M950038-00-M | Gary Sanders                  |                 | 7/26/95  | Attachment to MOU between University of Colorado and LIGO   |
| M950039-00-M | Phil Lindquist                |                 | 8/1/95   | Supplemental Proposal for Installation, Commissioning and Operations, dated August 1995   |
| M950040-00-M | National Science Foundation   |                 | 6/24/95  | Review Report of the NSF Review Committee for LIGO, 22-24 May 1995  |
| M950041-00-P | Phil Lindquist                |                 | 8/22/95  | Monthly Progress Report, July 1995  |
| M950042-00-M | California Institute of Tech. |                 | 8/21/95  | Background Documentation for the Pre-Program Advisory Committee   |
| M950043-00-M | Gary Sanders                  |                 | 8/28/95  | LIGO Weekly Reports - 1995  |
| M950044-00-M | David Shoemaker               |                 | 8/28/95  | MIT 96 Workplan   |
| M950045-00-D | Robbie Vogt                   |                 | 8/31/95  | Quarterly Report Input for the Detector Group, June - August 1995   |
| M950046-00-F | Ben Lucas                     |                 | 9/1/95   | PROJECT SYSTEM SAFETY PLAN COMPLETED, DRAFT   |
| M950046-01-F | Ben Lucas                     |                 | 9/8/95   | LIGO Project System Safety Management Plan, DRAFT   |
| M950046-02-F | Ben Lucas                     |                 | 9/15/95  | LIGO Project System Safety Management Plan, DRAFT   |
| M950046-A-M  | Ben Lucas                     |                 | 11/3/95  | LIGO Project System Safety Plan   |
| M950047-00-D | Robbie Vogt                   |                 | 8/31/95  | LIGO Detector (WBS 1.2) FY96 Work Plan  |
| M950048-00-M | Theodore M. Liszczak          |                 | 9/1/95   | Memorandum of Understanding - Tufts University (Signature Copy)   |
| M950049-00-M | Phil Lindquist                |                 | 9/13/95  | FY96 Work Plan  |
| M950050-00-P | Phil Lindquist                |                 | 9/25/95  | Quarterly Report  |
| M950051-00-M |                               |                 | 9/25/95  | Statement of Work for Ambient Ground Vibration Measurements at Livingston   |
| M950052-00-E | William Young                 |                 | 9/25/95  | Statement of Work for EMC/EMI Control Contract  |
| M950053-00-M | Fred Raab                     |                 | 9/26/95  | LIGO Qualifications for the Washington State R&D Sales Tax Deferral   |
| M950054-00-P | Phil Lindquist                |                 | 9/28/95  | Quarterly Report  |
| M950055-00-M |                               |                 | 9/26/95  | Charter of the LIGO Research Community  |
| M950056-A-C  | Rolf Bork                     |                 | 9/28/95  | Temporary Operational Safety Plan for Prototype PSL Operations  |
| M950057-00-M | Barry Barish                  |                 | 9/29/95  | Memorandum of Understanding between the Department of Physics and Astronomy (DPA) and the Center for Advanced Microstructures and Devices (CAMD) of the Louisiana State University (LSU) and the LIGO Project |
| M950058-00-M | Barry Barish                  |                 | 9/29/95  | Attachment 1 - Memorandum of Understanding (MOU) between LSU and LIGO   |
| M950059-00-M | Barry Barish                  |                 | 9/29/95  | Memorandum of Understanding between LSU-ERG and LIGO  |
| M950060-00-M | Syd Meshkov                   |                 | 10/3/95  | Memorandum of Understanding between Galileo at Stanford University and LIGO   |
| M950060-A-M  | Robert L. Byer                |                 | 11/1/95  | Memorandum of Understanding Between the GALILEO Program at Stanford University and the LIGO Project.  |
| M950060-A-M  | Barry Barish                  |                 | 11/1/95  | Memorandum of Understanding Between the GALILEO Program at Stanford University and the LIGO Project.  |
| M950061-00-M | Barry Barish                  |                 | 11/1/95  | Memorandum of Understanding (MOU) between the University of Wisconsin - Milwaukee Relativity Group (UWMRG) and the LIGO Project   |
| M950062-00-M | Joel E. Tohline               |                 | 7/11/95  | LIGO Livingston Site Project Support Proposal   |
| M950062-00-M | Volker Saile                  |                 | 7/11/95  | LIGO Livingston Site Project Support Proposal   |
| M950063-00-P | Phil Lindquist                |                 | 10/23/95 | Monthly Progress Report, September 1995   |
| M950064-00-P | Phil Lindquist                |                 | 11/1/95  | Monthly Progress Report, October 1995   |
| M950065-00-E | Albert Lazzarini              |                 | 11/8/95  | LIGO Policy on the Use of Home Computers to Perform Work for LIGO   |
| M950067-00-M | Jean Siomkos                  |                 | 11/3/95  | Proprietary Information Non-Disclosure Agreement between CIT and HDOS   |
| M950068-00-A | Nanette Founds                |                 | 11/8/95  | Pantex Plant Site-Wide Environmental Impact Statement (SWEIS)   |
| M950069-00-P | Phil Lindquist                |                 | 11/21/95 | LIGO Continuation Proposal for Cooperative Agreement PHY-9210038  |
| M950070-00-D | Robbie Vogt                   |                 | 11/30/95 | 1995 Annual Report Input - Detector Group   |
| M950071-00-B | Larry Jones                   |                 | 12/5/95  | Risk Assessment for the Beam Tube Contract with CBI (LIGO-C951080-00-B)   |
| M950071-00-B | Ed Jasnow                     |                 | 12/5/95  | Risk Assessment for the Beam Tube Contract with CBI (LIGO-C951080-00-B)   |
| M950072-00-M | NSF Review Committee          |                 | 11/21/95 | Review Report of the NSF Review Committee for the LIGO for 9-11 October 1995 Review   |
| M950073-00-M | Syd Meshkov                   |                 | 12/20/95 | Memorandum of Understanding (MOU) between the Michigan Gravity Wave Group (MGWG) in the Department of Physics of the University of Michigan and the LIGO Project  |
| M950074-00-M |                               |                 | 11/15/95 | SI (Metric) Orientation Guide for LIGO Project  |
| M950075-00-M | John Schlue                   |                 | 10/2/95  | JPL Task Plan for the Safety, Reliability and Quality Assurance Support for the Caltech LIGO Project  |
| M950075-01-M | John Schlue                   |                 | 12/1/95  | JPL Task Plan for the Safety, Reliability and Quality Assurance Support for the Caltech LIGO Project, Revision A  |

| Document No  | Full Name        | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|------------------|-----------------|----------|---|
| M950075-A-M  | John Schlue      |                 | 1/31/96  | JPL Task Plan for the Safety, Reliability and Quality Assurance Support for the LIGO Project        |
| M950076-00-P | Phil Lindquist   |                 | 12/1/95  | Annual Report (December 1994 - November 1995) for LIGO  |
| M950080-04-P | Felix Fernandez  |                 | 5/15/95  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End April 1995.                      |
| M950080-05-P | Felix Fernandez  |                 | 6/15/95  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End May 1995.                        |
| M950080-06-P | Felix Fernandez  |                 | 7/15/95  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End June 1995.                       |
| M950080-07-P | Felix Fernandez  |                 | 8/15/95  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End July 1995.                       |
| M950080-08-P | Felix Fernandez  |                 | 9/15/95  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End August 1995.                     |
| M950080-09-P | Felix Fernandez  |                 | 10/15/95 | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End September 1995.                  |
| M950080-10-P | Felix Fernandez  |                 | 11/15/95 | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End October 1995.                    |
| M950080-11-P | Felix Fernandez  |                 | 12/15/95 | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End November 1995.                   |
| M950080-12-P | Felix Fernandez  |                 | 1/15/96  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End December, 1996.                  |
| M950082-04-P | Felix Fernandez  |                 | 5/15/95  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End April 1995.     |
| M950082-05-P | Felix Fernandez  |                 | 6/15/95  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End May 1995.       |
| M950082-06-P | Felix Fernandez  |                 | 7/15/95  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End June 1995.      |
| M950082-07-P | Felix Fernandez  |                 | 8/15/95  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End July 1995.      |
| M950082-08-P | Felix Fernandez  |                 | 9/15/95  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End August 1995.    |
| M950082-09-P | Felix Fernandez  |                 | 10/15/95 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End September 1995. |
| M950082-10-P | Felix Fernandez  |                 | 11/15/95 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End October 1995.   |
| M950082-11-P | Felix Fernandez  |                 | 12/15/95 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End November 1995.  |
| M950082-12-P | Felix Fernandez  |                 | 1/15/96  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End December 1995.  |
| M950083-04-P | Felix Fernandez  |                 | 5/15/95  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End April 1995.          |
| M950083-05-P | Felix Fernandez  |                 | 6/15/95  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End May 1995.            |
| M950083-06-P | Felix Fernandez  |                 | 7/15/95  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End June 1995.           |
| M950083-07-P | Felix Fernandez  |                 | 8/15/95  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End July 1995.           |
| M950083-08-P | Felix Fernandez  |                 | 9/15/95  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End August 1995.         |
| M950083-09-P | Felix Fernandez  |                 | 10/15/95 | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End September 1995.      |
| M950083-10-P | Felix Fernandez  |                 | 11/15/95 | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End October 1995.        |
| M950083-11-P | Felix Fernandez  |                 | 12/15/95 | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End November 1995.       |
| M950083-12-P | Felix Fernandez  |                 | 1/15/96  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End December 1995.       |
| M950086-04-P | John Guerrero    |                 | 5/15/95  | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End APRIL 1995                             |
| M950086-05-P | John Guerrero    |                 | 6/15/95  | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End MAY 1995                               |
| M950086-08-P | John Guerrero    |                 | 9/15/95  | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End AUGUST 1995                            |
| M950086-10-P | John Guerrero    |                 | 11/15/95 | Monthly Progress Report - WBS 1.2, Detector Group - Month End OCTOBER 1995                          |
| M950086-12-P | John Guerrero    |                 | 1/15/96  | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End DECEMBER 1995                          |
| M950087-04-P | John Guerrero    |                 | 5/15/95  | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End APRIL 1995                                |
| M950087-06-P | John Guerrero    |                 | 7/15/95  | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End JUNE 1995                                 |
| M950087-08-P | John Guerrero    |                 | 9/15/95  | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End AUGUST 1995                               |
| M950087-10-P | John Guerrero    |                 | 11/15/95 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End OCTOBER 1995                              |
| M952000-00-R | Nergis Mavalvala |                 | 5/15/95  | Progress Report for Interferometer Alignment - R&D, April 1995                                      |
| M952001-00-D | David Shoemaker  |                 | 5/19/95  | Monthly Report for ASC Detector Subsystem, WBS 1.2.1.1.6 - April 1995                               |
| M952002-00-M | Mike Zucker      |                 |          | MIT LIGO Project Global Functions   |
| M952003-00-M | Rai Weiss        |                 |          | The LIGO Project and Industry   |
| M952004-00-R | Nergis Mavalvala |                 | 6/9/95   | Progress Report for Interferometer Alignment - R&D, May 1995  |
| M952005-00-M | Peter Fritschel  |                 | 6/9/95   | Progress Report for the Phase Noise Interferometer (PNI), May 1995                                  |
| M952006-00-D | David Shoemaker  |                 | 6/12/95  | Progress Report on Detector Alignment Task  |
| M952007-00-M | Peter Fritschel  |                 | 6/15/95  | April/May Report on the LSC Task  |
| M960001-A-P  | Ben Lucas        |                 | 3/25/96  | LIGO Laser Safety Program   |
| M960002-00-M | Rirchard Fischer |                 | 1/17/96  | Washington Department of Revenue Tax Meeting, 17 January 1996                                       |
| M960003-00-M | Barry Barish     |                 | 1/22/96  | Steve Vass Support for Ron Drever   |
| M960004-00-P | Phil Lindquist   |                 | 2/2/96   | Monthly Progress Report for December 1995   |
| M960005-00-D | Rirchard Fischer |                 | 1/30/96  | Weekly Detector Management Meeting Minutes for 30 January 1996                                      |
| M960006-00-D | Rirchard Fischer |                 | 2/6/96   | Weekly Detector Management Meeting Minutes for 6 February 1996                                      |
| M960007-00-P | Felix Fernandez  |                 | 2/15/96  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End January 1996.        |
| M960007-01-P | Felix Fernandez  |                 | 3/15/96  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End February 1996.       |
| M960007-02-P | Felix Fernandez  |                 | 4/19/96  | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - End of MARCH 1996              |
| M960007-03-P | Felix Fernandez  |                 | 5/7/96   | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End APRIL 1996           |
| M960007-04-P | Felix Fernandez  |                 | 6/7/96   | Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End May 1996                  |

| Document No  | Full Name            | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|----------------------|-----------------|---------|--|
| M960007-05-P | Felix Fernandez      |                 | 7/11/96 | LIGO Monthly Progress Report - WBS 1.0, Construction Phase Summary - Month End June 1996   |
| M960008-00-P | Felix Fernandez      |                 | 2/15/96 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End January 1996.  |
| M960008-01-P | Felix Fernandez      |                 | 4/5/96  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End FEBRUARY 1996  |
| M960008-02-P | Felix Fernandez      |                 | 4/19/96 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End MARCH 1996   |
| M960008-03-P | Felix Fernandez      |                 | 5/7/96  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End APRIL 1996   |
| M960008-04-P | Felix Fernandez      |                 | 6/7/96  | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End May 1996   |
| M960008-05-P | Felix Fernandez      |                 | 7/11/96 | LIGO Monthly Progress Report - WBS 1.1, Facilities and Vacuum Equipment - Month End June 1996  |
| M960009-00-P | John Guerrero        |                 | 2/15/96 | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End JANUARY 1996  |
| M960009-01-P | John Guerrero        |                 | 2/16/96 | Monthly Progress Report - WBS 1.2, Detector - Month End January 1996   |
| M960009-02-P | John Guerrero        |                 | 4/15/96 | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End MARCH 1996  |
| M960009-03-P | John Guerrero        |                 | 5/15/96 | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End APRIL 1996  |
| M960009-04-P | John Guerrero        |                 | 6/11/96 | Monthly Progress Report, Integrated Cost & Schedule Data - WBS 1.2, Detector - Month End May 1996  |
| M960009-05-P | John Guerrero        |                 | 7/15/96 | LIGO Monthly Progress Report - WBS 1.2, Detector - Month End JUNE 1996   |
| M960010-00-P | John Guerrero        |                 | 2/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End JANUARY 1996   |
| M960010-01-P | John Guerrero        |                 | 3/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End FEBRUARY 1996  |
| M960010-02-P | John Guerrero        |                 | 4/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End MARCH 1996   |
| M960010-03-P | John Guerrero        |                 | 5/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End APRIL 1996   |
| M960010-04-P | John Guerrero        |                 | 6/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End MAY 1996   |
| M960010-05-P | John Guerrero        |                 | 7/15/96 | LIGO Monthly Progress Report - WBS 1.3, R & D - Month End JUNE 1996  |
| M960011-00-P | Felix Fernandez      |                 | 2/1/96  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End January 1996.   |
| M960011-01-P | Felix Fernandez      |                 | 3/15/96 | Monthly Progress Report - WBS 1.4, Project Office - Month End February 1996  |
| M960011-02-P | Felix Fernandez      |                 | 4/19/96 | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End MARCH 1996  |
| M960011-03-P | Felix Fernandez      |                 | 5/7/96  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End APRIL 1996  |
| M960011-04-P | Felix Fernandez      |                 | 6/7/96  | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End May 1996  |
| M960011-05-P | Felix Fernandez      |                 | 7/11/96 | LIGO Monthly Progress Report - WBS 1.4, Project Office - Month End June 1996   |
| M960014-00-D | Rirchard Fischer     |                 | 2/13/96 | Weekly Detector Management Meeting Minutes of 13 February 1996   |
| M960018-00-P | Phil Lindquist       |                 | 2/28/96 | Monthly Progress Report, JANUARY 1996  |
| M960024-00-P | Phil Lindquist       |                 | 3/28/96 | Quarterly Report (December 1995 - February 1996), dated March 1996, DRAFT  |
| M960025-00-R |                      |                 | 1/31/96 | Annual Report for NSF Grant AST-9417371 for Relativistic Astrophysics, May 1, 1994 -- January 31, 1996   |
| M960026-00-R |                      |                 | 1/31/96 | Annual Progress Report for NSF Grant PHY-9424337 for Gravitational Radiation, September 4, 1994 -- January 31, 1996  |
| M960030-00-P | Phil Lindquist       |                 | 4/26/96 | Monthly Progress Report (End of March 1996) The Construction, Operation, and Supporting Research and Development of a Laser Interferometer Gravitational-Wave Observatory (LIGO) |
| M960030-00-P | Earl Friese          |                 | 4/26/96 | Monthly Progress Report (End of March 1996) The Construction, Operation, and Supporting Research and Development of a Laser Interferometer Gravitational-Wave Observatory (LIGO) |
| M960031-00-D | Rirchard Fischer     |                 | 4/17/96 | Weekly Detector Management Meeting Minutes - April 2, 1996   |
| M960032-00-D | Rirchard Fischer     |                 | 4/17/96 | Weekly Detector Management Meeting Minutes - April 16, 1996  |
| M960033-00-D | Rirchard Fischer     |                 | 4/23/96 | Weekly Detector Management Meeting Minutes - April 23, 1996  |
| M960036-00-M | NSF Review Committee |                 | 5/7/96  | Final MIT/LIGO Report - For Oversight Committee Meeting, 14 May 1996   |
| M960037-00-P | Earl Friese          |                 | 5/31/96 | Monthly Progress Report (End of April 1996) The Construction, Operation, and Supporting Research and Development of a Laser Interferometer Gravitational-Wave Observatory(LIGO)  |
| M960037-00-P | Phil Lindquist       |                 | 5/31/96 | Monthly Progress Report (End of April 1996) The Construction, Operation, and Supporting Research and Development of a Laser Interferometer Gravitational-Wave Observatory(LIGO)  |
| M960038-A-D  | Dennis Coyne         |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960038-A-D  | Mike Zucker          |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960038-A-D  | David Shoemaker      |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960038-A-D  | Bill Althouse        |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960038-A-D  | Seiji Kawamura       |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960038-A-D  | Lisa Sievers         |                 | 5/26/96 | LIGO Detector Subsystem Review Report - Design Requirements Review, Seismic Isolation  |
| M960039-00-D | David Shoemaker      |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Jenny Logan          |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Albert Lazzarini     |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Seiji Kawamura       |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Jay Heefner          |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Rai Weiss            |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960039-00-D | Peter Fritschel      |                 | 6/26/96 | Design Requirements Review - Length Sensing/Control  |
| M960040-00-M | NSF Review Committee |                 | 5/3/96  | Review Report of the NSF Review Committee for the LIGO, 9-11 April 1996  |
| M960041-00-D | Rirchard Fischer     |                 | 6/3/96  | Weekly Detector Management Meeting Minutes - May 7 , 1996  |
| M960042-00-D | Rirchard Fischer     |                 | 6/3/96  | Weekly Detector Management Meeting Minutes - May 25, 1996  |
| M960043-00-D | Rirchard Fischer     |                 | 6/4/96  | Weekly Detector Management Meeting Minutes - June 4, 1996  |
| M960044-00-D | Rirchard Fischer     |                 | 6/11/96 | Weekly Detector Management Meeting Minutes - June 12, 1996   |
| M960047-00-D | Rirchard Fischer     |                 | 7/9/96  | Weekly Detector Management Meeting Minutes - 10 July 1996  |

| Document No  | Full Name           | ContractorDocNo | Doc Dt  | Full Title   |
|--------------|---------------------|-----------------|---------|--|
| M960051-A-M  | CIT LIGO Personnel  |                 | 6/15/96 | Letter of Intent for a Research and Development Program for Advanced LIGO Detectors by the LIGO MIT/Caltech Groups       |
| M960051-A-M  | MIT LIGO Personnel  |                 | 6/15/96 | Letter of Intent for a Research and Development Program for Advanced LIGO Detectors by the LIGO MIT/Caltech Groups       |
| M960052-00-M | Richard Isaacson    |                 | 6/7/96  | Input Request for Proposal from Gustafson and Riles Requesting NSF Support   |
| M960053-00-M |                     |                 | 1/17/96 | Proposal to the NSF for Gravity Wave Detection and Astrophysics  |
| M960054-00-M | Gary Sanders        |                 | 5/29/96 | LIGO Visitors Program Proposal   |
| M960054-00-M | Barry Barish        |                 | 5/29/96 | LIGO Visitors Program Proposal   |
| M960055-00-P | Phil Lindquist      |                 | 6/29/96 | Quarterly Report (March 1996 - May 1996), dated June 1996  |
| M960059-00-P | Ed Chargois         |                 | 6/27/96 | LIGO Database Proposal   |
| P860001-00-D | Daniel Dewey        |                 | 1/17/86 | A Search for Astronomical Gravitational Radiation With An Interferometric Broad Band Antenna                             |
| P870001-00-D | Jeffrey Clark Livas |                 | 5/1/87  | Upper Limits For Gravitational Radiation From Some Astrophysical Sources   |
| P890001-00-R | Mike Zucker         |                 | 1/1/89  | Experiments With A Laser Interferometric Gravitational Wave Antenna  |
| P920001-00-F |                     |                 | 2/1/92  | Summary of the Concepts and Reference Design for a LIGO - Information for Potential Contractors                          |
| P930001-00-R | Fred Raab           |                 | 5/19/93 | Thermal noise in the test mass suspensions of a laser interferometer gravitational-wave detector prototype               |
| P930001-00-R | Aaron Gillespie     |                 | 5/19/93 | Thermal noise in the test mass suspensions of a laser interferometer gravitational-wave detector prototype               |
| P940001-00-R | Alex Abramovici     |                 | 6/29/94 | Measured limits to contamination of optical surfaces by elastomers in vacuum   |
| P940002-00-I | Martin W. Regehr    |                 | 8/1/94  | Signal Extraction and Control for an Interferometric Gravitational Wave Detector   |
| P940003-00-R | Fred Raab           |                 | 11/1/94 | Thermally Excited Vibrations of the Mirrors of Laser Interferometer Gravitational-Wave Detectors                         |
| P940003-00-R | Aaron Gillespie     |                 | 11/1/94 | Thermally Excited Vibrations of the Mirrors of Laser Interferometer Gravitational-Wave Detectors                         |
| P940004-00-D | Rick Savage         |                 |         | Status of the LIGO 40-Meter Interferometer   |
| P940005-00-U | Yaron Hefetz        |                 |         | Sensitivity of the LIGO Interferometer to Mirror Misalignment and Method for Automatic Alignment                         |
| P940006-00-U | Robert Spero        |                 |         | Shot Noise Limited Sensitivity of the LIGO 40 Meter Interferometer   |
| P940007-00-U | Lisa Sievers        |                 |         | Seismic Isolation in the LIGO 40 Meter Interferometer  |
| P940008-00-R | Mike Zucker         |                 |         | Measurement of Optical Path Fluctuations due to Residual Gas in the LIGO 40 Meter Interferometer                         |
| P940009-00-U | Fred Raab           |                 | 12/1/94 | The LIGO Project: Progress and Prospects (LIGO Preprint PP94-9)  |
| P940010-00-R | Stan Whitcomb       |                 |         | The Laser Interferometer Gravitational-Wave Observatory (LIGO): A Status Report  |
| P940011-00-R | Aaron Gillespie     |                 | 5/16/94 | Suspension losses in the pendula of laser interferometer gravitational-wave detectors (stored extra copies)              |
| P940012-00-R | Seiji Kawamura      |                 | 6/4/94  | Mirror-Orientation Noise in a Fabry-Perot Interferometer Gravitational Wave Detector                                     |
| P940012-00-R | Mike Zucker         |                 | 6/4/94  | Mirror-Orientation Noise in a Fabry-Perot Interferometer Gravitational Wave Detector                                     |
| P950001-00-U | Martin W. Regehr    |                 | 3/23/95 | Demonstration of a power-recycled Michelson interferometer with Fabry-Perot arms using frontal modulation                |
| P950001-01-R | Martin W. Regehr    |                 | 3/23/95 | Demonstration of a power-recycled Michelson interferometer with Fabry-Perot arms using frontal modulation                |
| P950002-00-R | Stan Whitcomb       |                 | 3/31/95 | The LIGO   |
| P950002-00-R | Robert Spero        |                 | 3/31/95 | The LIGO   |
| P950003-00-U | N. Wolfe            |                 | 4/28/95 | Parsons Helps Study 'Black Holes' to Gain Understanding of Matter, Energy in Universe                                    |
| P950004-00-U | Stan Whitcomb       |                 | 5/2/95  | Response to the above "Parsons P...3"  |
| P950005-00-R | Jordan Camp         |                 |         |  |
| P950005-00-R | Jay Heefner         |                 |         |  |
| P950005-00-R | Rolf Bork           |                 |         |  |
| P950005-00-R | Lisa Sievers        |                 |         |  |
| P950006-00-I | Aaron Gillespie     |                 | 4/26/95 | Thermal Noise in the Initial LIGO Interferometers  |
| P950007-00-R | Stan Whitcomb       |                 | 6/1/95  | Precision Laser Interferometry in the LIGO Project   |
| P950007-01-R | Stan Whitcomb       |                 | 8/25/95 | Precision Laser Interferometry in the LIGO Project   |
| P950008-00-R | Joseph Giaime       |                 | 6/1/95  | Studies of Laser Interferometer Design and a Vibration Isolation System for Interferometric Gravitational Wave Detectors |
| P950009-00-R | K. Thorne           |                 | 6/1/95  | Gravitational Waves  |
| P950010-00-R |                     |                 | 7/20/95 | Interferometric antenna response for gravitational wave detection  |
| P950011-00-R | Jordan Camp         |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Joseph Giaime       |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Seiji Kawamura      |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Aaron Gillespie     |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | A. Kuhnert          |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Robert Spero        |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Fred Raab           |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Rick Savage         |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | David Shoemaker     |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Lisa Sievers        |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Robbie Vogt         |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Denise Durance      |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |
| P950011-00-R | Mike Zucker         |                 | 8/11/95 | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer  |

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|--------------|-----------------------------|----------------------|----------|---|
| P950011-00-R | Stan Whitcomb               |                      | 8/11/95  | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer                                   |
| P950011-00-R | Rai Weiss                   |                      | 8/11/95  | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer                                   |
| P950011-00-R | Torrey Lyons                |                      | 8/11/95  | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer                                   |
| P950011-00-R | Alex Abramovici             |                      | 8/11/95  | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer                                   |
| P950011-00-R | Bill Althouse               |                      | 8/11/95  | Improved Displacement Sensitivity in the LIGO 40 Meter Interferometer                                   |
| P950011-02-R | Alex Abramovici             |                      | 1/11/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Torrey Lyons                |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Bill Althouse               |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Denise Durance              |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Joseph Giaime               |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Aaron Gillespie             |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Seiji Kawamura              |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Jordan Camp                 |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Fred Raab                   |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Mike Zucker                 |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
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| P950011-03-R | Lisa Sievers                |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Robert Spero                |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Alex Abramovici             |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Robbie Vogt                 |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Rai Weiss                   |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Stan Whitcomb               |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | A. Kuhnert                  |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950011-03-R | Rick Savage                 |                      | 4/30/96  | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO                   |
| P950012-00-R | Ke-Xun Sun                  |                      | 8/17/95  | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-00-R | Eric Gustafson              |                      | 8/17/95  | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-00-R | M. M. Fejer                 |                      | 8/17/95  | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-00-R | Robert L. Byer              |                      | 8/17/95  | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-01-R | Robert L. Byer              |                      | 11/27/95 | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-01-R | M. M. Fejer                 |                      | 11/27/95 | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-01-R | Ke-Xun Sun                  |                      | 11/27/95 | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950012-01-R | Eric Gustafson              |                      | 11/27/95 | A Sagnac Interferometer for Gravitational Wave Detection  |
| P950013-00-M | K. Thorne                   |                      | 6/1/95   | Gravitational Waves   |
| P950014-00-M | Peter Saulson               |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950014-00-M | David Shoemaker             |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950014-00-M | K. Thorne                   |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950014-00-M | Stan Whitcomb               |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950014-00-M | Rai Weiss                   |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950014-00-M | Alex Abramovici             |                      | 6/1/95   | Gravitational Waves Astrophysics  |
| P950015-00-D | Jay Heefner                 |                      | 8/22/95  | Guided Lock Acquisition in a Suspended Fabry Perot Cavity   |
| P950015-00-D | Lisa Sievers                |                      | 8/22/95  | Guided Lock Acquisition in a Suspended Fabry Perot Cavity   |
| P950015-00-D | Jordan Camp                 |                      | 8/22/95  | Guided Lock Acquisition in a Suspended Fabry Perot Cavity   |
| P950015-00-D | Rolf Bork                   |                      | 8/22/95  | Guided Lock Acquisition in a Suspended Fabry Perot Cavity   |
| P950017-00-E | Dennis Coyne                |                      | 11/1/95  | The LIGO Project - An Abstract  |
| P950017-01-E | Dennis Coyne                |                      | 6/13/96  | The Laser Interferometer Gravitational-Wave Observatory (LIGO) Project                                  |
| P950017-02-E | Dennis Coyne                |                      | 6/24/96  | The Laser Interferometer Gravitational-Wave Observatory (LIGO) Project                                  |
| P950019-00-M |                             |                      | 12/12/95 | American National Standard (ANSI) for Safe Use of Lasers (ANSI Z136.1-1993)                             |
| P950020-00-M |                             |                      | 11/28/95 | Laser Safety  |
| P950021-00-M | Ben Lucas                   |                      | 2/2/96   | Laser Safety Training Program - Student Workbook  |
| P950025-00-O | DOA, Army Corp of Engineers | EP 1110-1-8, Vol. 3  | 8/1/95   | Construction Equipment Ownership and Operating Expense Schedule, Region III - dated August 1995         |
| P950026-00-O | DOA, Army Corp of Engineers | EP 1110-1--8, Vol. 8 | 8/1/95   | Construction Equipment Ownership and Operating Expense Schedule, Region VIII - dated August 1995        |
| P952000-00-R | Joe Gaime                   |                      |          |   |
| P960003-00-O | Otto Matherny               |                      | 2/2/96   | Bid Dates   |
| P960007-00-E | Albert Lazzarini            |                      | 4/4/96   | LIGO Project: An Overview   |
| P960009-00-V | Richard Bagley              | V049-PL-133          | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the STP-H 2000C Turbo Molecular Pump                    |
| P960010-00-V | Richard Bagley              | V049-PL-133          | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the Drystar EDP200 and EDP300 Chemical Dry Vacuum Pumps |
| P960011-00-V | Richard Bagley              | V049-PL-133          | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the EH Mechanical Booster Pumps                         |

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|--------------|----------------------------|-----------------|----------|--|
| P960011-03-R | Rick Savage                |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Fred Raab                  |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Torrey Lyons               |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | A. Kuhnert                 |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | David Shoemaker            |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Aaron Gillespie            |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Robbie Vogt                |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Joseph Giaime              |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Denise Durance             |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Jordan Camp                |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Seiji Kawamura             |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Robert Spero               |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Bill Althouse              |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Rai Weiss                  |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Stan Whitcomb              |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Mike Zucker                |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Alex Abramovici            |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960011-03-R | Lisa Sievers               |                 | 4/8/96   | Improved Sensitivity in a Gravitational Wave Interferometer and Implications for LIGO - PREPRINT |
| P960012-00-V | Richard Bagley             | V049-PL-133     | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the QDP Drystar Vacuum Pump                      |
| P960013-00-V | Richard Bagley             | V049-PL-133     | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the EXC Turbomolecular Pump Controllers          |
| P960014-00-V | Richard Bagley             | V049-PL-133     | 3/27/96  | Edwards High Vacuum Pump Instruction Manual for the EXT Turbomolecular Pumps                     |
| P960016-00-D | Witold Sokolowski          |                 | 10/15/87 | Military Specification Glass Beads: For Cleaning and Peening                                     |
| P960017-00-M |                            |                 | 7/1/96   | LIGO Will Capture and Analyze Gravitational Waves  |
| P960018-00-R | Gabriela Gonzalez          |                 | 3/13/96  | A Simulation Program for the VIRGO Experiment  |
| P960019-00-D | Jenny Logan                |                 | 5/8/96   | Developments in Isolation, Suspension and Thermal Noise Issues for GEO 600                       |
| P960019-00-D | J. Hough                   |                 | 5/8/96   | Developments in Isolation, Suspension and Thermal Noise Issues for GEO 600                       |
| P960020-00-D | Lightwave Electronics Corp |                 | 1/1/93   | Introduction to Diode-Pumped Solid-State Lasers  |
| P960021-00-M |                            |                 | 3/1/96   | Ripples in Space Time  |
| P960022-00-M | Barry Barish               |                 | 5/31/96  | LIGO: An Overview  |
| P960023-00-R | Frederick Su               |                 | 3/1/96   | Ripples In Space-Time  |
| T870001-00-U | McMaster-Carr Supp. Co.    |                 | 9/10/87  |  |
| T880001-00-U | Rai Weiss                  |                 | 7/6/88   |  |
| T880002-00-U | Fred Raab                  |                 | 7/22/88  |  |
| T880003-00-U | Rai Weiss                  |                 | 6/15/88  |  |
| T880004-00-U | McMaster-Carr Supp. Co.    |                 | 8/30/88  |  |
| T880005-00-U | McMaster-Carr Supp. Co.    |                 | 7/1/88   |  |
| T880006-00-U | Alex Abramovici            |                 | 7/22/88  |  |
| T880007-00-U | Rai Weiss                  |                 | 7/5/88   |  |
| T880008-00-U | McMaster-Carr Supp. Co.    |                 | 7/21/88  |  |
| T880009-00-U | McMaster-Carr Supp. Co.    |                 | 6/9/88   |  |
| T880010-00-U | Mike Zucker                |                 | 7/21/88  |  |
| T880011-00-U | McMaster-Carr Supp. Co.    |                 | 5/23/88  |  |
| T880012-00-U | McMaster-Carr Supp. Co.    |                 | 7/1/88   |  |
| T880013-00-U | McMaster-Carr Supp. Co.    |                 | 7/20/88  |  |
| T880014-00-U | Beth Moore                 |                 | 4/28/88  |  |
| T880015-00-U | McMaster-Carr Supp. Co.    |                 | 7/21/88  |  |
| T880016-00-U | Beth Moore                 |                 | 6/7/88   |  |
| T880017-00-U | Rai Weiss                  |                 | 7/4/88   |  |
| T880018-00-U | McMaster-Carr Supp. Co.    |                 | 8/11/88  |  |
| T880019-00-U | Alex Abramovici            |                 | 8/3/88   |  |
| T880020-00-U | K. Thorne                  |                 | 8/21/88  |  |
| T880021-00-U | McMaster-Carr Supp. Co.    |                 | 8/28/88  |  |
| T880022-00-U | McMaster-Carr Supp. Co.    |                 | 11/16/88 |  |
| T880023-00-U | Mike Zucker                |                 | 6/16/88  |  |
| T880024-00-U | Alex Abramovici            |                 | 8/19/88  |  |
| T880025-00-U | McMaster-Carr Supp. Co.    |                 | 9/30/88  |  |
| T880026-00-U | McMaster-Carr Supp. Co.    |                 | 8/30/88  |  |



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| T880027-00-U | McMaster-Carr Supp. Co. |                 | 9/6/88   |   |
| T880028-00-U | McMaster-Carr Supp. Co. |                 | 7/5/88   |   |
| T880029-00-U | McMaster-Carr Supp. Co. |                 | 7/25/88  |   |
| T880030-00-U | McMaster-Carr Supp. Co. |                 | 10/3/88  |   |
| T880031-00-U | McMaster-Carr Supp. Co. |                 | 11/30/88 |   |
| T880032-00-U | Alex Abramovici         |                 | 10/6/88  |   |
| T880033-00-U | McMaster-Carr Supp. Co. |                 | 10/5/88  |   |
| T880034-00-U | McMaster-Carr Supp. Co. |                 | 9/1/88   |   |
| T880035-00-U | McMaster-Carr Supp. Co. |                 | 10/22/88 |   |
| T880036-00-U | McMaster-Carr Supp. Co. |                 | 11/14/88 |   |
| T880037-00-U | McMaster-Carr Supp. Co. |                 | 11/14/88 |   |
| T880038-00-U | Fred Asiri              |                 | 11/2/88  |   |
| T880039-00-U | Mike Zucker             |                 | 11/18/88 |   |
| T880040-00-U | Bill Althouse           |                 | 11/20/88 |   |
| T880041-00-U | Beth Moore              |                 | 11/23/88 |   |
| T880042-00-U | McMaster-Carr Supp. Co. |                 | 10/28/88 |   |
| T880043-00-U | McMaster-Carr Supp. Co. |                 | 11/30/88 |   |
| T880044-00-U | Fred Raab               |                 | 12/1/88  |   |
| T880045-00-U | McMaster-Carr Supp. Co. |                 | 12/7/88  |   |
| T880046-00-U | McMaster-Carr Supp. Co. |                 | 12/14/88 |   |
| T880047-00-U | McMaster-Carr Supp. Co. |                 | 12/15/88 |   |
| T880048-00-U | Beth Moore              |                 | 12/5/88  |   |
| T880049-00-U | Rai Weiss               |                 | 12/9/88  |   |
| T880050-00-U | McMaster-Carr Supp. Co. |                 | 12/10/88 | Specification for the Slope of LIGO Arms, Draft   |
| T880051-00-U | McMaster-Carr Supp. Co. |                 |          |   |
| T880052-00-U | Alex Abramovici         |                 | 10/1/88  | Do Wiggle Effects Depend on Mode Cleaner Length?  |
| T890002-00-U | Alex Abramovici         |                 | 2/5/89   |   |
| T890003-00-U | McMaster-Carr Supp. Co. |                 | 7/16/06  |   |
| T890004-00-U | McMaster-Carr Supp. Co. |                 | 3/2/89   |   |
| T890005-00-E | Peter Saulson           |                 | 2/21/89  | On Local Coincidence, Mid-Station, and Correlated Noise   |
| T900001-00-D |                         |                 | 7/21/95  | this is a test of the full title  |
| T920001-00-R | Science Team            |                 | 10/23/92 | LIGO Interferometer Conceptual Design Handbook, Version 2.0   |
| T920002-00-D | Robert Spero            |                 | 2/28/92  | Diffraction Loss and Minimum Mirror Size  |
| T920003-A-D  | Mike Zucker             |                 | 4/10/92  | Test Mass Suspension and Control Concept for Initial LIGO Receivers   |
| T920003-A-D  | Seiji Kawamura          |                 | 4/10/92  | Test Mass Suspension and Control Concept for Initial LIGO Receivers   |
| T920003-A-D  | Lisa Sievers            |                 | 4/10/92  | Test Mass Suspension and Control Concept for Initial LIGO Receivers   |
| T930001-01-C | Lisa Sievers            |                 | 10/7/93  | Some preliminary notes on the LIGO Control and Data Systems (CDS) (old #CDS_N_001)  |
| T930001-01-C | David Shoemaker         |                 | 10/7/93  | Some preliminary notes on the LIGO Control and Data Systems (CDS) (old #CDS_N_001)  |
| T930001-01-C | Joseph Giaime           |                 | 10/7/93  | Some preliminary notes on the LIGO Control and Data Systems (CDS) (old #CDS_N_001)  |
| T930001-01-C | Martin W. Regehr        |                 | 10/7/93  | Some preliminary notes on the LIGO Control and Data Systems (CDS) (old #CDS_N_001)  |
| T930001-01-C | Fred Raab               |                 | 10/7/93  | Some preliminary notes on the LIGO Control and Data Systems (CDS) (old #CDS_N_001)  |
| T930002-01-C |                         |                 | 12/1/93  | Outline of LIGO Data Acquisition Requirements (old #CDS_N_005)  |
| T930003-00-B | Larry Jones             |                 | 12/10/93 | Notes from Boude on conductance calculations showing improvements from the normal electric analog method                      |
| T930004-00-B | Warren A. Carpenter     |                 | 12/7/93  | Calculations fro the coupon outgassing systems  |
| T930005-00-B | Larry Jones             |                 | 11/19/93 | Article on Brookhaven 950 C vacuum bake entitled "Outgassing and desorption of the stainless-steel beam tubes after different |
| T930006-00-B | Larry Jones             |                 | 11/18/93 | Article entitled "Construction and commissioning of the alternating-gradient synchrotron booster ultrahigh vacuum system      |
| T930007-00-B | Ken Flessas             |                 | 11/5/93  | Sample vieiwgraphs for spiral tube manipulating considerations  |
| T930008-00-B | Larry Jones             |                 | 11/3/93  | Suggested Qualification Test and Coupon Test P&I schematic modifications  |
| T930009-00-B | Larry Jones             |                 | 10/29/93 | Carbide precipitation curve   |
| T930010-00-B | Warren A. Carpenter     |                 | 10/4/93  | Calculations of the Calder and Lewin diffusion characteristics  |
| T930011-00-B | Larry Jones             |                 | 12/14/93 | Suggested guidelines for wrapping and shipping  |
| T930012-00-B | Larry Jones             |                 | 12/13/93 | Authorization to proceed with task of preparing coupons to measure filler wire effects on outgassing                          |
| T930013-00-D | Rai Weiss               |                 | 4/23/96  | Some Thoughts on Interferometer Evolution   |
| T940001-01-C |                         |                 | 1/3/94   | Naming Conventions for sub-systems, local units, and signals (old #CDS_N_004)   |
| T940002-03-C |                         |                 | 1/11/94  | Building Requirements for CDS (old #CDS_N_006/CG0002-TN)  |
| T940002-04-C | V. Schmidt              |                 | 2/20/95  | Building Requirements for CDS (old #CDS_N_006/CG0002-TN)  |
| T940002-05-C | V. Schmidt              |                 | 2/23/95  | Building Requirements for CDS (old #CDS_N_006/CG0002-TN)  |

| Document No  | Full Name           | ContractorDocNo | Doc Dt   | Full Title  |
|--------------|---------------------|-----------------|----------|---|
| T940003-01-C |                     |                 | 2/9/94   | Functional Description for the Prestabilized Laser Subsystem (old #CDS_N_007)                                       |
| T940004-01-C |                     |                 | 6/15/94  | CDS Document Numbering (old #CG0001-STD)  |
| T940005-01-C |                     |                 | 8/15/94  | Vacuum Compatible Cable Connectors and Cables (old #CI0002-TN)  |
| T940006-01-C |                     |                 | 8/12/94  | CDS-Baseline 1 (old #CG0004-TN)   |
| T940007-00-B | Larry Jones         |                 | 1/25/94  | AMU values and document on strategy entitled "Vacuum System Model Gas Solutions and RGA Spectra"                    |
| T940008-00-B | Larry Jones         |                 | 1/21/94  | R. Weiss' plots of coil temperatures  |
| T940009-00-B | Larry Jones         |                 | 6/8/94   | Comments on hot procedures  |
| T940010-00-B | Larry Jones         |                 | 6/3/94   | Comments on MetalPro operations list  |
| T940011-00-B | Larry Jones         |                 | 3/8/94   | Sketches and information for slab and enclosure discussion  |
| T940012-00-B | Larry Jones         |                 | 2/2/94   | Sketch of how Caltech is planning to conduct the module bakeout   |
| T940013-00-B | Larry Jones         |                 | 1/3/94   | Response to request to the data format used in Beam Tube Demo Testing   |
| T940014-00-B | Marty Tellalian     |                 | 5/4/94   | Weld Wire Cleaning and Quality Control  |
| T940015-00-B | Marty Tellalian     |                 | 2/4/94   | Support Thermal Insulation and Analysis   |
| T940016-00-B | Marty Tellalian     |                 | 4/22/94  | Beam Tube Erection Sequence and QT Item Listing   |
| T940017-00-B | Warren A. Carpenter |                 | 2/21/94  | Module Leak Tests   |
| T940018-00-B | Larry Jones         |                 | 1/25/94  | Comments to CBI letter on alternate cleaning evaluation   |
| T940019-00-B | Marty Tellalian     |                 | 10/5/94  | Section Leak Test - Day 3   |
| T940020-00-B | L. Reed             |                 | 8/31/94  | Nonconformance Reports, Assembly Check Lists, Mishap Report, and Shop Release for Shipment Check List               |
| T940021-00-B | Rai Weiss           |                 | 10/3/94  | Section Repair and Leak Test  |
| T940022-00-B | Rai Weiss           |                 | 10/4/94  | Section Leak Test   |
| T940023-00-B | Larry Jones         |                 | 10/6/94  | Disagreement on acceptable leakage  |
| T940024-00-B | Marty Tellalian     |                 | 10/11/94 | Lab Notes for Section Leak Test - October 11, 1994  |
| T940025-00-B | Marty Tellalian     |                 | 10/11/94 | Lab Notes for Section Leak Test - October 6 - 10, 1994  |
| T940026-00-B | Larry Jones         |                 | 10/21/94 | Beam Tube Sequence of Events, Occurance of Bleeders   |
| T940027-00-B | Larry Jones         |                 | 10/25/94 | Steps for Beam Tube Cleaning  |
| T940028-00-B | Larry Jones         |                 | 11/1/94  | Hydrocarbon peaks in the weeper data  |
| T940029-00-B | Larry Jones         |                 | 11/2/94  | FTIR analysis from beam tube bleeders   |
| T940030-00-B | Marty Tellalian     |                 | 11/2/94  | Laboratory Analysis of the Contaminated Solvent   |
| T940031-00-B | Larry Jones         |                 | 11/5/94  | Near term procedure to modify and test beam tube cleaning   |
| T940032-00-B | Marty Tellalian     |                 | 11/8/94  | Cleaning Assessment Sampling Procedure  |
| T940033-00-B | Marty Tellalian     |                 | 11/10/94 | MSDS for Ansul AFFF Foaming Agent   |
| T940034-00-B | Larry Jones         |                 | 11/10/94 | Water break test  |
| T940035-00-B | Marty Tellalian     |                 | 11/16/94 | FTIR Analysis of Contaminated Propanol Flushed Through Test Tube Section  |
| T940036-00-B | Marty Tellalian     |                 | 11/16/94 | Cleaning Procedure for the 8' Trial Section   |
| T940037-00-B | Larry Jones         |                 | 11/16/94 | Cleaning Procedure  |
| T940038-00-B | Larry Jones         |                 | 11/18/94 | Information on isopropyl alcohol from the Aldrich Chemical and Fisher Scientific Catalogs                           |
| T940039-00-B | Marty Tellalian     |                 | 11/23/94 | FTIR Reports on the 7' Tube Section Sampling  |
| T940040-00-B | Larry Jones         |                 | 11/28/94 | Transmittal of LIGO-T940041-00-B  |
| T940041-00-B | Rai Weiss           |                 | 11/28/94 | Summary of information on cleaning of 8' tube   |
| T940042-00-B | Larry Jones         |                 | 12/9/94  | Notes on the QT items tested vs. items by analysis  |
| T940043-00-B | Marty Tellalian     |                 | 12/11/94 | Status of Section Cleaning and Pumpdown Readiness Meeting   |
| T940044-00-B | Larry Jones         |                 | 12/12/94 | Recommended changes for positioning thermocouples on the QT module  |
| T940045-00-B | Steve Peters        |                 | 12/15/94 | FTIR Report from Fitzsimmons dated 12/6/94 for cleanliness assessment samples                                       |
| T940046-00-B | Steve Peters        |                 | 12/15/94 | FTIR Report from Fitzsimmons dated 12/14/94 for cleanliness assessment samples                                      |
| T940047-00-B | Steve Peters        |                 | 12/16/95 | FTIR spectra for cleaning assessment samples (should be attached to FTIR dated 12/6/94)                             |
| T940048-00-B | Steve Peters        |                 | 12/16/94 | FTIR spectra and report for the cleaning assessment samples from the 22-B beam tube assembly, dated 12-13-94        |
| T940049-00-B | Larry Jones         |                 | 12/19/94 | QT FTIR data - FTIR Measurements of Solvent Drainage  |
| T940050-00-B | Steve Peters        |                 | 12/22/94 | Beam Tube Profile Information   |
| T940051-00-B | Alex Abramovici     |                 | 2/8/94   | Procedure for Measuring H2 Outgassing from Steel Coupons  |
| T940052-00-B | Larry Jones         |                 | 8/8/94   | Transmittal of LIGO-T94-0051-00B  |
| T940053-00-B | Larry Jones         |                 | 8/1/94   | Plot of measurements made of 60' spiral QT tube straightness and diameter in second plane                           |
| T940054-00-B | Marty Tellalian     |                 | 8/26/94  | Dent Calculation Example and GPS Convention   |
| T940055-00-B | Larry Jones         |                 | 9/13/94  | R. Weiss' comments on allowable vacuum box leaks/pressure achieved  |
| T940056-00-B | Larry Jones         |                 | 11/2/94  | R. Weiss' Summary of information and recommendations on the beam tube cleaning following visit and further research |
| T940057-00-B | Larry Jones         |                 | 11/3/94  | R. Weiss' surface tension measurements  |
| T940058-00-B | Larry Jones         |                 | 11/4/94  | R. Weiss' input on morning meeting on beam tube cleaning  |
| T940059-00-B | Larry Jones         |                 | 11/15/94 | ASTM Atomizer and Water Break tests   |

| Document No  | Full Name               | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|-------------------------|-----------------|----------|--|
| T940060-00-B | Larry Jones             |                 | 12/22/94 | Comments on QT Pumpdown, Bake Out and Outgassing Test Procedure, Rev. 3  |
| T940061-00-D | Lisa Sievers            |                 | 3/18/94  | LIGO Recycled Interferometer Servo Design Update   |
| T940062-00-D | Ju Li                   |                 | 1/24/94  | Conceptual Design of Advanced LIGO Vibration Isolation Systems and Effect on Vacuum Equipment Design                         |
| T940062-00-D | Lisa Sievers            |                 | 1/24/94  | Conceptual Design of Advanced LIGO Vibration Isolation Systems and Effect on Vacuum Equipment Design                         |
| T940063-00-R | K. Thorne               |                 | 8/2/94   | Noise Due to Backscatter Off Baffles, the Nearby Wall, and Objects at the Fare End of the Beam Tube; and Recommended Actions |
| T940063-00-R | Eanna Flanagan          |                 | 8/2/94   | Noise Due to Backscatter Off Baffles, the Nearby Wall, and Objects at the Fare End of the Beam Tube; and Recommended Actions |
| T950001-01-C | Jay Heefner             |                 | 1/30/95  | Prestabilized Laser Controls, DRAFT  |
| T950002-00-B | Jeff Hermann            |                 | 2/14/95  | Interface with Beam Tube Installation  |
| T950003-00-U | McMaster-Carr Supp. Co. |                 |          |  |
| T950004-A-E  | Albert Lazzarini        |                 | 3/7/95   | Derivation of Global and Local Coordinate Axes for the LIGO Sites  |
| T950004-B-E  | Albert Lazzarini        |                 | 3/7/95   | Derivation of Global and Local Coordinate Axes for the LIGO Sites.   |
| T950005-00-D | Mike T. Gamble          |                 | 3/7/95   | LIGO Beam Tube Study Report - Dynamic Response of the Beam Tube to Handford, WA Site Ambient Vibration Spectrum              |
| T950006-00-D | Mike T. Gamble          |                 | 3/9/95   | LIGO Facilities Study Report - Foundation Response and Local Optical Lever Performance, Draft                                |
| T950007-01-C | V. Schmidt              |                 | 3/16/95  | Operational Scenarios Relevant to CDS  |
| T950007-02-C | V. Schmidt              |                 | 4/28/95  | Scenarios and Procedures Relevant to CDS   |
| T950008-A-E  | Hiro Yamamoto           |                 | 3/14/95  | Multi-Thin Layer Coating Modeling  |
| T950009-00-D | V. Bzagini              |                 | 1/5/95   | Information about the temperature stability of the ground at different depth and about the inclinations of a building        |
| T950010-00-R | Denise Durance          |                 | 3/17/95  | Electrical Short at South End Axial Drive Coil (2 March 1995)[also see 40-M Logbook #37, p. 40-42]                           |
| T950011-01-D | Seiji Kawamura          |                 | 3/24/95  | Suspension Design Requirements, DRAFT  |
| T950011-06-D | Seiji Kawamura          |                 | 5/26/95  | Suspension Design Requirements, DRAFT  |
| T950011-14-D | Fred Raab               |                 | 5/23/96  | Suspension Design Requirements   |
| T950011-14-D | Seiji Kawamura          |                 | 5/23/96  | Suspension Design Requirements   |
| T950012-00-C | Rolf Bork               |                 | 3/28/95  | Pulse Damping Test Control System Description  |
| T950013-00-B | Marty Tellalian         |                 | 3/24/95  | Proposed Modifications to the Beam Tube Slab and Cover   |
| T950014-00-B | Larry Jones             |                 | 1/3/95   | R. Weiss' comments/recommended revisions to the QT procedure   |
| T950015-00-B | Steve Peters            |                 | 2/16/95  | Temperature profiles of the QT beam tube at baffle ring location   |
| T950016-00-B | Larry Jones             |                 | 2/20/95  | R. Weiss' latest plots   |
| T950017-00-B | Steve Peters            |                 | 1/6/95   | Information on K&E Tilt Levels and Jig Transits  |
| T950018-00-B | Steve Peters            |                 | 1/7/95   | Transmittal of LIGO-T950019-00-B   |
| T950019-00-B | Warren A. Carpenter     |                 | 1/7/95   | Comments concerning R. Weiss' Version of the Outgassing Test Procedures  |
| T950020-00-B | Steve Hand              |                 | 3/30/95  | LIGO Beam Tube Cover Revision - comments on proposed cover modifications   |
| T950021-00-C | Rolf Bork               |                 |          |  |
| T950022-00-C | Rolf Bork               |                 |          |  |
| T950023-00-B | Marty Tellalian         |                 | 4/14/95  | Man-Hour Estimate for Module Leak Testing  |
| T950024-00-R | Alex Abramovici         |                 | 4/21/95  | Review of 12m Mode Cleaner Task  |
| T950025-00-V | John Worden             |                 | 4/21/95  | Proposed Alternate Leak Check Method for Beam Tube Module  |
| T950026-00-B | Larry Jones             |                 | 4/24/95  | Metal seals to replace O-rings   |
| T950027-00-U | S. Lind                 |                 | 4/26/95  | Noise level measurements and testing   |
| T950028-00-R | Alex Abramovici         |                 | 4/30/95  | Changes in fast PZT Mirror Design for the PSL  |
| T950029-00-R | Aaron Gillespie         |                 | 4/28/95  | Installation of the New Test Masses  |
| T950029-01-R | Stan Whitcomb           |                 | 4/28/95  | Installation of Monolithic Test Masses in the 40m Interferometer (title change from early version)                           |
| T950030-02-D | Jordan Camp             |                 | 5/3/95   | Pre Stabilized Laser Design Requirements   |
| T950030-03-D | Jordan Camp             |                 | 5/3/95   | Pre Stabilized Laser Design Requirements   |
| T950031-00-R | Seiji Kawamura          |                 | 5/8/95   | Electronic Noise in a Length Control System for the LIGO 40m Interferometer  |
| T950032-00-U | William O. Miller       |                 | 5/9/95   | Beam Tube Dynamic Analysis, Preliminary, dated 28 April 1995   |
| T950033-00-U | K. Thorne               |                 | 4/2/95   | Scattered-Light Noise for LIGO   |
| T950034-00-U | Mike T. Gamble          |                 | 4/28/95  | LIGO Seismic Isolation Design Study Report   |
| T950035-00-R | Malik                   |                 | 5/25/95  |  |
| T950036-00-R | Alex Abramovici         |                 | 5/31/95  | Mk II Pumping  |
| T950037-00-C | Rolf Bork               |                 |          |  |
| T950038-00-R | Lisa Sievers            |                 | 6/14/95  | Measurement of Ambient Relative Test Mass Motion in the 40M Prototype  |
| T950039-00-B | Larry Jones             |                 | 6/28/95  |  |
| T950040-00-V | John Worden             |                 | 1/18/95  |  |
| T950041-00-B | Marty Tellalian         |                 | 6/6/95   |  |
| T950042-00-B | Larry Jones             |                 | 5/31/95  |  |
| T950043-00-V | John Worden             |                 | 7/13/95  |  |
| T950044-00-D |                         |                 | 7/18/95  | IBS Coatings Uniformity  |

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| T950045-00-C | Jay Heefner      |                 | 7/24/95  | PSL CDS Interface Control Document, DRAFT                                       |
| T950046-00-R | Peter Fritschel  |                 | 7/24/95  | Performance of the Barry Control Inc. STACIS Active Isolation System            |
| T950046-00-R | G. Gonzalez      |                 | 7/24/95  | Performance of the Barry Control Inc. STACIS Active Isolation System            |
| T950047-00-D | Alex Abramovici  |                 | 7/24/95  | Evaluation of Nd:YAG (1064nm) Lasers for Use in the Initial LIGO Inteferometers |
| T950048-00-O | Rick Savage      |                 | 7/24/95  | Crane Hook Height in the LVEA and VEAs  |
| T950049-00-D | David Shoemaker  |                 | 7/25/95  | ASC Centering Subsystem Description   |
| T950050-00-O | Mike Zucker      |                 | 7/25/95  | Response to LIGO-T950048-00-O regarding Crane Hook Height in LVEA/VEA           |
| T950051-00-O |                  |                 | 7/31/95  | Depth of Transco Pipeline   |
| T950052-00-D | Steven Chuang    |                 | 8/1/95   | HDOS Test Mass Inspection, Serial #COC-A008                                     |
| T950053-00-E | David Shoemaker  |                 | 8/1/95   | Use of Low Power YAG Lasers for LIGO  |
| T950053-00-E | Alex Abramovici  |                 | 8/1/95   | Use of Low Power YAG Lasers for LIGO  |
| T950054-00-C | Rolf Bork        |                 | 8/4/95   | CDS Design Requirements Document, DRAFT   |
| T950055-00-E | Rai Weiss        |                 | 8/4/95   | Drawing for Valve Aperture  |
| T950056-00-E |                  |                 | 7/28/95  | End-to-End Model Goals  |
| T950057-00-E | Kent Blackburn   |                 | 8/18/95  | AVS Software Standards Guide  |
| T950058-00-R | Jay Heefner      |                 | 8/31/95  | Design Report for the 40M Test Mass Suspension Prototype                        |
| T950058-00-R | Seiji Kawamura   |                 | 8/31/95  | Design Report for the 40M Test Mass Suspension Prototype                        |
| T950058-00-R | Janeen Hazel     |                 | 8/31/95  | Design Report for the 40M Test Mass Suspension Prototype                        |
| T950059-00-D | David Shoemaker  |                 | 8/23/95  | ASC: Sensors for the Initial Alignment  |
| T950060-00-D |                  |                 | 8/28/95  | Naming Convention and Interface Definition for SUS                              |
| T950060-03-D | Fred Raab        |                 | 5/23/96  | Naming Convention and Interface Definition for SUS                              |
| T950060-03-D | Seiji Kawamura   |                 | 5/23/96  | Naming Convention and Interface Definition for SUS                              |
| T950061-00-D | Fred Raab        |                 | 8/28/95  | Interferometer Requirements Flowdown to SUS                                     |
| T950061-00-D | Seiji Kawamura   |                 | 8/28/95  | Interferometer Requirements Flowdown to SUS                                     |
| T950062-01-C | Heidi Li         |                 | 8/8/95   | The WebMaker Setup at LIGO  |
| T950063-01-C | Heidi Li         |                 | 8/8/95   | LIGO WebMaker Manual  |
| T950064-00-D | Dale Ness        |                 | 8/29/95  | Optic Rotation Test Graphs/Stats  |
| T950065-00-C | Rolf Bork        |                 | 8/29/95  | Guidelines for Design Requirements Documents                                    |
| T950065-A-C  | Rolf Bork        |                 | 9/15/95  | Guidelines for Design Requirement Documents, DRAFT                              |
| T950066-00-R | Alex Abramovici  |                 | 9/12/95  | New Entries fore the Approved Materials List                                    |
| T950066-01-R | Alex Abramovici  |                 | 9/13/95  | New Entries for the Approved Materials List                                     |
| T950066-02-E | Albert Lazzarini |                 | 11/29/95 | Response to Multiple Action Items in Parsons' Requirements Definition Worksheet |
| T950066-02-E | Dennis Coyne     |                 | 11/29/95 | Response to Multiple Action Items in Parsons' Requirements Definition Worksheet |
| T950067-00-D | Dale Ness        |                 | 8/30/95  | Coating Thickness Data  |
| T950068-00-D | Ramin Lalezari   |                 | 9/6/95   | Drawing and Specifications for Fused Quartz Substrate                           |
| T950069-00-D | David Shoemaker  |                 | 9/15/95  | Naming and Interface Definitions for ASC Wavefront Sensing and Centering        |
| T950070-00-D | John Tappan      |                 | 9/18/95  | Naming and Interface Definition for ASC Optical Lever                           |
| T950071-00-D | Andie Overfield  |                 | 9/18/95  | Outgassing Information on Techtron PPS  |
| T950072-00-R | James Mason      |                 | 9/18/95  | Evaluation of Proposed Changes to the Suspension Sensor Electronics             |
| T950072-00-R | Seiji Kawamura   |                 | 9/18/95  | Evaluation of Proposed Changes to the Suspension Sensor Electronics             |
| T950073-00-D | David Shoemaker  |                 | 9/18/95  | Interferometer Requirement Flowdown to ASC                                      |
| T950074-00-D | David Shoemaker  |                 | 9/19/95  | Naming and Definition for ASC Initial Alignment                                 |
| T950075-00-D |                  |                 | 9/19/95  | Bill Kells  |
| T950076-00-D |                  |                 | 9/19/95  | Bill Kells  |
| T950077-00-D | John Tappan      |                 | 9/20/95  | Information on Pizzo Mirror Tilters and Laser Diode Drivers                     |
| T950078-00-E | Dennis Coyne     |                 | 9/20/95  | Recommendation for Guidance/Direction on Support Requirements for NG:yag Laser  |
| T950079-00-E | Dennis Coyne     |                 | 9/28/95  | LIGO System Block Diagrams  |
| T950080-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950081-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950082-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950083-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950084-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950084-01-E | Dennis Coyne     |                 | 10/27/95 | Control Data System (CDS) Power Requirements in the LVEA                        |
| T950085-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |
| T950086-00-E | Dennis Coyne     |                 | 11/16/95 | Proposed Drawing Template and Release, Approval and Revision Procedure          |
| T950087-00-E | Dennis Coyne     |                 | 11/18/95 | Cryopump Infrared Shielding Considerations                                      |
| T950088-00-E |                  |                 | 9/20/95  | Held for Dennis Coyne   |

| Document No  | Full Name                | ContractorDocNo | Doc Dt   | Full Title   |
|--------------|--------------------------|-----------------|----------|--|
| T950089-00-E |                          |                 | 9/20/95  | Dennis Coyne   |
| T950090-00-E |                          |                 | 9/20/95  | Held for Dennis Coyne  |
| T950091-00-D | Dale Ness                |                 | 9/21/95  | Optic Coating Notes  |
| T950092-00-B | Marty Tellalian          |                 | 9/18/95  | Support Bracket Calculations   |
| T950093-00-D | Mike Zucker              |                 | 9/26/95  | Ham Isolation Stay-Clear   |
| T950094-00-C | Jay Heefner              |                 | 9/26/95  | 40m BPCU Electronics Requirements  |
| T950095-00-C | Norbert Solomonson       |                 | 9/26/95  | Vacuum Feedthrough and Cabling Design Requirements Document  |
| T950095-00-C | Jay Heefner              |                 | 9/26/95  | Vacuum Feedthrough and Cabling Design Requirements Document  |
| T950095-00-C | Rich Abbott              |                 | 9/26/95  | Vacuum Feedthrough and Cabling Design Requirements Document  |
| T950096-00-R | Fred Raab                |                 | 9/27/95  | Abstracts of LIGO Ph.D. Theses Submitted During 1994-95  |
| T950097-00-E | Alex Abramovici          |                 | 9/27/95  | Technical Aspects of Using Nd:YAG(1064m) lasers Instead of Argon Ion Lasers in the Initial LIGO Interferometers                            |
| T950097-00-E | David Shoemaker          |                 | 9/27/95  | Technical Aspects of Using Nd:YAG(1064m) lasers Instead of Argon Ion Lasers in the Initial LIGO Interferometers                            |
| T950098-00-D | David Shoemaker          |                 | 9/26/95  | Response to Paper re Diffraction Loss and Minimum Mirror Size (LIGO-T920002-00-D)  |
| T950099-00-D | Jordan Camp              |                 | 9/28/95  | Naming Convention and Interface Definition for Input/Output Optics   |
| T950100-00-D | Jordan Camp              |                 | 9/28/95  | Naming Convention and Interface Definition for PSL   |
| T950101-00-R | K. Thorne                |                 | 1/3/95   | Light Scattering and Baffle Configuration for LIGO   |
| T950101-00-R | Eanna Flanagan           |                 | 1/3/95   | Light Scattering and Baffle Configuration for LIGO   |
| T950102-00-R | Eanna Flanagan           |                 | 4/2/95   | Scattered-Light Noise for LIGO   |
| T950102-00-R | K. Thorne                |                 | 4/2/95   | Scattered-Light Noise for LIGO   |
| T950103-00-D | Norbert Solomonson       |                 | 9/29/95  | Naming Convention and Interface Definition for SEI   |
| T950104-00-D | Daniel Sigg              |                 | 10/5/95  | Description of the Electronics for the FMI Wavefront Experiment  |
| T950104-00-D | David Shoemaker          |                 | 10/5/95  | Description of the Electronics for the FMI Wavefront Experiment  |
| T950104-00-D | Nergis Mavalvala         |                 | 10/5/95  | Description of the Electronics for the FMI Wavefront Experiment  |
| T950105-00-D | Daniel Sigg              |                 | 10/5/95  | Calibration of the FMI Wavefront Experiment  |
| T950105-00-D | David Shoemaker          |                 | 10/5/95  | Calibration of the FMI Wavefront Experiment  |
| T950105-00-D | Nergis Mavalvala         |                 | 10/5/95  | Calibration of the FMI Wavefront Experiment  |
| T950106-00-D | David Shoemaker          |                 | 10/6/95  | ASC (Alignment Sensing/Control) Optical Lever Design Requirements Document   |
| T950106-00-D | John Tappan              |                 | 10/6/95  | ASC (Alignment Sensing/Control) Optical Lever Design Requirements Document   |
| T950107-00-E | Albert Lazzarini         |                 | 10/12/95 | Orientation of the LIGO Beam Center Lines with Respect to Foundation Slabs   |
| T950108-00-R | Alex Abramovici          |                 | 10/20/95 | Conceptual Lay-Out for a 10 W Single Frequency, Prestabilized Nd:YAG Laser   |
| T950108-00-R | Peter Fritschel          |                 | 10/20/95 | Conceptual Lay-Out for a 10 W Single Frequency, Prestabilized Nd:YAG Laser   |
| T950109-00-R | Malik Rakhmanov          |                 | 10/10/95 | The Effect of Noise in the Modulation Reference Source to the Gravitational Wave Signal  |
| T950110-00-D | Lisa Sievers             |                 | 10/19/95 | Interface Consistency Between Subsystems   |
| T950113-05-O | Rick Savage              |                 | 12/18/95 | Vibration and Acoustic Requirements for the Laser and Vacuum Equipment Area (LVEA) and Vacuum Equipment Areas (VEA) of the LIGO Facilities |
| T950116-00-O | Hal Amick, PE            |                 | 11/15/95 | More on Vibration isolation of Mechanical Equipment  |
| T950118-00-R | Alex Abramovici          |                 | 11/20/95 | Prestabilized NPRO: Frequency Sensing and Shifting   |
| T950119-00-O | Mark Coles               |                 | 11/22/95 | Cost Scaling Rules of Thumb for the LIGO Building  |
| T950120-00-C | David Barker             |                 | 1/11/96  | CDS Control and Monitoring Conceptual Design   |
| T950120-00-C | Rolf Bork                |                 | 1/11/96  | CDS Control and Monitoring Conceptual Design   |
| T950123-00-O | Professor Philip Kreider |                 | 12/11/95 | Lightning Protection   |
| T950125-00-B | Lance Buboltz            |                 | 12/15/95 | Termination Support Sketch and Summary of Loads per Anchor Bolt  |
| T950126-00-V | Mike Zucker              |                 | 12/18/95 | Conversation with Kleinschmidt of Cambridge Acoustical Associates  |
| T950127-00-B | Lance Buboltz            |                 | 12/18/95 | Termination Support Foundation Loads   |
| T950128-00-O | Mark Coles               |                 | 12/19/95 | Trip Report - Livingston, LA - 13-15 December 1995   |
| T950129-00-O | A. Rohay                 |                 | 12/23/95 | Ambient Ground Vibration Measurements at the Hanford, Washington LIGO Site   |
| T950130-00-B | Warren A. Carpenter      |                 | 12/19/95 | LNT1 Cold Trap Contamination and Calibrated Leak Recalibration for Beam Tube Module  |
| T950131-00-B | K. Thorne                |                 | 12/15/95 | Reduced Serrations In Baffle Plane   |
| T952001-00-V | M.Zucker                 |                 | 5/15/95  | Analysis of Vacuum Equipment Descoping Options - COMPETITION SENSITIVE   |
| T952002-00-R | Yaron Hefetz             |                 | 6/1/95   | Demonstration of Automatic Alignment of a Suspended Fabry-Perot Cavity   |
| T952003-00-R | Nergis Mavalvala         |                 | 6/1/95   | LIGO Length Control System: Design Considerations for a Table-top Prototype Interferometer   |
| T952004-00-R | Partha Saha              |                 | 6/1/95   | Fast Estimation of Transverse Fields in High Finesse Optical Cavities  |
| T952005-00-R | Joseph Giaime            |                 | 6/1/95   | A Passive Vibration Isolation Stack for LIGO: Design, Modeling, and Testing  |
| T952005-00-R | David Shoemaker          |                 | 6/1/95   | A Passive Vibration Isolation Stack for LIGO: Design, Modeling, and Testing  |
| T952005-00-R | Lisa Sievers             |                 | 6/1/95   | A Passive Vibration Isolation Stack for LIGO: Design, Modeling, and Testing  |
| T952005-00-R | Partha Saha              |                 | 6/1/95   | A Passive Vibration Isolation Stack for LIGO: Design, Modeling, and Testing  |
| T952006-00-R | Gabriela Gonzalez        |                 | 6/1/95   | Analysis of an Imperfect Interferometer  |
| T952007-00-I | David Shoemaker          |                 | 12/31/95 | DRAFT, Detector Alignment Sensing/Control (ASC) Design Requirements Document (DRD)   |

| Document No  | Full Name          | ContractorDocNo   | Doc Dt  | Full Title   |
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| T952007-00-R | B. Lantz           |                   | 6/1/95  | Spatial Uniformity of Silicon Photodiodes  |
| T952008-00-R | Gabriela Gonzalez  |                   | 6/1/95  | A Manual for the Use of the FFT Optical Modeling Program   |
| T952009-00-E | Rai Weiss          |                   | 6/1/95  | LIGO Optics Specification: General Concepts and Constraints  |
| T952010-00-D | Rai Weiss          |                   | 6/1/95  | Physics Environmental Monitor Subsystem of the LIGO Detector   |
| T952011-00-R | Rai Weiss          |                   | 6/1/95  | Optical Pathlength Noise in Sensitive Interferometers due to Residual Gas                              |
| T952012-00-R | Peter Fritschel    |                   | 6/1/95  | Optics Design for the PNI: Mirror Substrate Specification  |
| T952013-00-D | David Shoemaker    |                   | 6/21/95 |  |
| T952013-00-U |                    |                   |         |  |
| T952014-00-D | Peter Fritschel    |                   | 6/23/95 |  |
| T952014-00-U |                    |                   |         |  |
| T960001-00-R | David Shoemaker    |                   | 1/5/96  | Sapphire Beamsplitters and Test Masses for Advanced Laser Interferometer Gravitational Wave Detectors  |
| T960002-00-R | Vladimir Braginsky |                   | 2/2/96  | 1996 Annual Report for Moscow State University - Suspensions and Suspension Noise for LIGO Test Masses |
| T960003-00-R | Peter Saulson      |                   | 1/3/96  | Notes on Meeting at Corning, Inc on 14 October 1995 re. Fused Silica and Internal Friction             |
| T960004-00-C | Rolf Bork          |                   | 1/23/96 | CDS Software Development Plan  |
| T960005-00-R | Daniel Sigg        |                   | 5/1/96  | Principles of Calculating Alignment Signals in Complex Resonant Optical Interferometers                |
| T960005-00-R | Yaron Hefetz       |                   | 5/1/96  | Principles of Calculating Alignment Signals in Complex Resonant Optical Interferometers                |
| T960005-00-R | Nergis Mavalvala   |                   | 5/1/96  | Principles of Calculating Alignment Signals in Complex Resonant Optical Interferometers                |
| T960007-00-D |                    |                   | 1/23/96 | Isolation Stack Modeling   |
| T960008-00-D |                    |                   | 1/26/96 | Information regarding Silica, Material Choice for Gravitational Wave Measuring Experiments             |
| T960009-00-C | Rolf Bork          |                   | 5/28/96 | LIGO Data Acquisition System Design Requirements   |
| T960010-00-C | Rolf Bork          |                   | 7/12/96 | CDS Data Acquisition System Conceptual Design  |
| T960010-00-C | David Barker       |                   | 7/12/96 | CDS Data Acquisition System Conceptual Design  |
| T960012-00-R | Eanna Flanagan     |                   | 1/28/96 | Specifications for the Baffle Serrations in the LIGO Beam Tubes  |
| T960012-00-R | K. Thorne          |                   | 1/28/96 | Specifications for the Baffle Serrations in the LIGO Beam Tubes  |
| T960014-00-C | Rich Abbott        |                   | 2/8/96  | Vacuum Feedthrough and Cabling Conceptual Design   |
| T960014-00-C | Jay Heefner        |                   | 2/8/96  | Vacuum Feedthrough and Cabling Conceptual Design   |
| T960017-00-D | Dell Olsen         |                   | 2/2/96  | Background Energy Nulling  |
| T960018-00-D | J. Hough           |                   | 2/2/96  | Calculations   |
| T960021-00-B | Larry Jones        |                   | 2/22/96 | Beam Tube Alignment Concept Meeting, 20 February 1996  |
| T960022-00-B | Marty Tellalian    | MOF File 2.3/0039 | 2/22/96 | Sketches Showing the Cut Lines in the Qualification Test Assembly                                      |
| T960023-00-D | Denise Durance     |                   | 2/20/96 | Common Mode Servo  |
| T960024-00-C | Rolf Bork          |                   | 3/19/96 | Vacuum Control and Monitoring System Design Requirements   |
| T960024-A-C  | Rolf Bork          |                   | 5/8/96  | Vacuum Control and Monitoring System (VCMS) Design Requirements  |
| T960025-01-M | Gary Sanders       |                   | 3/22/96 | LIGO Computing Systems Design Requirements Document  |
| T960026-00-D | Eric Ponslet       | HHYTEC-TN-LIGO-0  | 2/21/96 | Isolation Stacks Preliminary Design Methodology  |
| T960027-01-I | Peter Fritschel    |                   | 4/18/96 | Length Sensing and Control Subsystem Conceptual Design Description                                     |
| T960027-01-I | Jordan Camp        |                   | 4/18/96 | Length Sensing and Control Subsystem Conceptual Design Description                                     |
| T960027-01-I | Mike Zucker        |                   | 4/18/96 | Length Sensing and Control Subsystem Conceptual Design Description                                     |
| T960027-01-I | Lisa Sievers       |                   | 4/18/96 | Length Sensing and Control Subsystem Conceptual Design Description                                     |
| T960033-00-D | David Redding      | DCR-96-05         | 3/5/96  | Completion of Reduced Frequency-Resolution Recycled Interferometer Simulation                          |
| T960034-00-D | Eric Ponslet       | HYTEC-TN-LIGO-03  | 3/1/96  | Beam Splitter Chambers (BSC) Stack Design Trend Study  |
| T960035-00-E | Kent Blackburn     |                   | 3/8/96  | LIGO Data Tape Features  |
| T960036-00-E | Dennis Coyne       |                   | 3/6/96  | Comments on PSI's Proposed Electrical Conduit Stub-Up Plan for the LVEA and VEAs                       |
| T960038-00-I | Mike Zucker        |                   | 3/22/96 | LSC Photodetector Development  |
| T960040-00-D | Seiji Kawamura     |                   | 3/11/96 | Response of Pendulum to Motion of Suspension Point   |
| T960042-00-E | Albert Lazzarini   |                   | 3/25/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes                                 |
| T960042-00-E | Bill Althouse      |                   | 3/25/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes                                 |
| T960042-01-E | Albert Lazzarini   |                   | 4/10/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes.                                |
| T960042-01-E | Bill Althouse      |                   | 4/10/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes.                                |
| T960042-02-E | Bill Althouse      |                   | 4/19/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes.                                |
| T960042-02-E | Albert Lazzarini   |                   | 4/19/96 | Alignment Tolerances and Re-Alignment Criteria for the LIGO Beam Tubes.                                |
| T960051-00-E | Craig Conley       |                   | 3/19/96 | Integrated Layout Drawings: Usage & Maintenance  |
| T960051-00-E | Dennis Coyne       |                   | 3/19/96 | Integrated Layout Drawings: Usage & Maintenance  |
| T960052-00-E | Kent Blackburn     |                   | 6/3/96  | LIGO Modeling Software Specification Plan  |
| T960055-00-D | J. Hough           |                   | 3/19/96 | Research Towards Isolation and Suspension Systems for GEO 600  |
| T960059-00-O | Fred Asiri         |                   | 3/25/96 | PUD Surge Arresters Detail/Hanford   |
| T960061-00-D | David Tanner       |                   | 3/8/96  | Input / Output Optics  |

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| T960065-02-D | Fred Raab              |                 | 4/15/96 | Seismic Isolation Design Requirements Documents                                       |
| T960065-02-D | Norbert Solomonson     |                 | 4/15/96 | Seismic Isolation Design Requirements Documents                                       |
| T960066-00-D | Fred Raab              |                 | 4/15/96 | Seismic Isolation Conceptual Design   |
| T960070-00-C | Seiji Kawamura         |                 | 4/5/96  | Framework of Range Requirement of Suspension Actuator                                 |
| T960070-00-D | Seiji Kawamura         |                 | 4/5/96  | Framework of Range Requirement of Suspension Actuator                                 |
| T960074-05-D | Janeen Hazel           |                 | 5/23/96 | Suspension Preliminary Design   |
| T960074-05-D | Seiji Kawamura         |                 | 5/23/96 | Suspension Preliminary Design   |
| T960074-05-D | Fred Raab              |                 | 5/23/96 | Suspension Preliminary Design   |
| T960077-00-E | Rai Weiss              |                 | 4/15/96 | Data Acquisition and Analysis   |
| T960078-00-P | William Tyler          |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Alex Abramovici        |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Otto Matherny          |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Albert Lazzarini       |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Tom Eagar              |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Fred Dylla             |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-00-P | Bill Althouse          |                 | 4/18/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Ben Lucas              |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | William Tyler          |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Otto Matherny          |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Albert Lazzarini       |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Tom Eagar              |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Fred Dylla             |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Bill Althouse          |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-01-P | Alex Abramovici        |                 | 4/26/96 | LIGO Beam Tube Modules Updated Design Review  |
| T960078-A-P  | Bill Althouse          |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Alex Abramovici        |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Fred Dylla             |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | William Tyler          |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Ben Lucas              |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Albert Lazzarini       |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Tom Eagar              |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960078-A-P  | Otto Matherny          |                 | 5/3/96  | LIGO Design Review Report: LIGO Beam Tube Modules Updated Design Review               |
| T960079-00-R | Martin W. Regehr       |                 | 4/22/96 | Twiddle - A Program for Analyzing Interferometer Frequency Response (formerly ifresp) |
| T960079-00-R | James Mason            |                 | 4/22/96 | Twiddle - A Program for Analyzing Interferometer Frequency Response (formerly ifresp) |
| T960080-00-D | Prof. Katherine Creath |                 | 4/23/96 | BLK2ASC/ASC2BLK Conversion Description  |
| T960082-00-D | Rick Savage            |                 | 5/22/96 | NPRO-PSL Design Requirements  |
| T960082-00-D | Alex Abramovici        |                 | 5/22/96 | NPRO-PSL Design Requirements  |
| T960083-A-E  | Albert Lazzarini       |                 | 4/30/96 | Derivation of CDS Rack Acoustic Noise Specifications                                  |
| T960086-02-D | Norbert Solomonson     |                 | 6/11/96 | Suspension Test Plan, DRAFT   |
| T960086-02-D | Fred Raab              |                 | 6/11/96 | Suspension Test Plan, DRAFT   |
| T960086-02-D | Seiji Kawamura         |                 | 6/11/96 | Suspension Test Plan, DRAFT   |
| T960087-00-D | Gabriela Gonzalez      |                 | 5/13/96 | Seismic Waves   |
| T960088-00-D | Nobuki Kawashima       |                 | 5/15/96 | Conversion of the Fringe Function to the Displacement                                 |
| T960089-00-D | Alex Abramovici        |                 | 5/22/96 | NPRO-PSL Conceptual Design  |
| T960089-00-D | Rick Savage            |                 | 5/22/96 | NPRO-PSL Conceptual Design  |
| T960092-00-D | Edward Daw             |                 | 5/16/96 | Preliminary Analysis of the Axion Power Sensitivity from the Early 1996 Axion Data    |
| T960094-00-D | Fred Raab              |                 | 5/24/96 | Notes on Interferometer Calibration   |
| T960096-00-P | Fred Raab              |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | Albert Lazzarini       |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | William Tyler          |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | Rai Weiss              |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | G. Giberson            |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | Fred Dylla             |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960096-00-P | Bill Althouse          |                 | 6/10/96 | LIGO Design Review Report - LIGO Vacuum Equipment Final Design Review                 |
| T960098-00-B | Paul McGrath           |                 | 4/30/96 | Feasibility Study, to Resistance Weld LIGO Baffles                                    |
| T960100-00-B | Larry Jones            |                 | 6/13/96 | Beam Tube Enclosure (BTE) - Pump Cart Layout: New Roughing Pump System                |
| T960101-00-D | Seiji Kawamura         |                 | 6/24/96 | Statement of Work: Installation of the New 40m Suspension                             |

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| T960102-00-R |                 |                 | 6/24/96 | Article on Martin Black                                    |
| T960104-00-D | A. Rohay        |                 | 6/27/96 | Geographic and Seasonal Variation of Microseismic Noise    |
| T960105-00-D | Lee Brandt      |                 | 7/2/96  | MSDS For Vac Seal  |
| T960106-00-B | R. Vincent      |                 | 7/1/96  | West Coast Porcelain                                       |
| T960107-00-C | Rolf Bork       |                 | 7/17/96 | LIGO Interferometer Diagnostics System Design Requirements |
| T960108-00-C | Rolf Bork       |                 | 7/15/96 | Interferometer Diagnostics Conceptual Design               |
| T960112-00-D | K.H. Maier      |                 | 7/10/96 | 208Pb Calculations   |
| T960119-00-D | A. Rohay        |                 | 7/11/96 | Revision of the Differential Motion Plots                  |
| T960122-00-I | Peter Fritschel |                 | 7/12/96 | Proposed Initial Detector MC and RC Baseline Lengths       |
| T960122-00-I | Mike Zucker     |                 | 7/12/96 | Proposed Initial Detector MC and RC Baseline Lengths       |
| T960123-00-B | Larry Jones     |                 | 7/19/96 | Spiral Weld Outgas Measurements                            |