

Appendix 22
Project Final Dossier
preparation procedure

PROJECT FINAL DOSSIER PREPARATION PROCEDURE

TABULATION OF REVISED PAGES

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1 PURPOSE

This procedure is for project parties' mutual common understanding to prepare appropriate final documentation of main project, sub-projects and all equipment to meet Owner requirements.

2 DEFINITIONS AND ABBREVIATIONS

Project	To be defined
Employer/Client	
MC	To be defined
Consultant	To be defined
Contractor	To be defined

- MDR: Master Document Register
- TQ: Technical Query
- NCR: Non-conformance Report
- MR: Material Requisition
- ITP: Inspection Test Plan
- QCP: Quality Control Plan
- VDB: Vendor Data Book
- AFC: Approved for Construction (Final Approved)
- MOM: Minutes of Meeting
- ECC: Erection Completion Certificate
- PAC: Provisional Acceptance Certificate
- FAC: Final Acceptance Certificate
- CA: Change Announcement
- CR: Change Request
- CP: Change Proposal

3 REFERENCES

- Contract
- Project Coordination Procedure
- Project Numbering Procedure
- Engineering circulating Procedure

4 GENERAL

4.1 Main Structure

Project Final Dossier has five dossiers as described in below table

((Table NO.1: Dossier Structure))

Binder Cover sheet	Dossier	Book	Chapter
Red	1-Engineering	B0-Final Feasibility Study and Conceptual Design Package	--
		B1-Basic Design Book	
		B2-Detail Design Book	--
Yellow	2-Vendor Data Book	B1- MR & Purchase Order Data	C1-Contract
			C2-MR
		B2-Vendor Design Book	C1-Vendor Documents
			C2-TQ & NCR
			C3-Manuals
		B3-Manufacturing Data Report	C1-Material Certificates
			C2-Reports & Records
			C3-Procedures
Green	3-Construction Book	B1-Construction Records	C1- Construction Procedures/Specification
			C2- ITP & QCP
			C3-Welding Documents
			C4- Material Documents
			C5- Technical Queries/Site Queries/NCR
			C6- Permits and Work Delivery Check Lists
			C7- As built Drawings
		B2-Quality Control	C1- Civil Data
			C2- Steel Structure Data
			C3- Piping test package Data
			C4- Fixed Mechanical Data
			C5- Rotary Mechanical Data
			C6- Electrical Data
			C7- Instrument Data
			C8- Telecommunication Data
			C9- Safety Data
		B3-Erection Completion Certificates	Each Unit in one Volume
		B4- Commissioning Documents	C1-Precommissioning Completion Certificates
			C2-Commissioning Completion Certificate
			C3-Training package
			C4- All Supervisory reports
Blue	4-Plant Operating Manual	Plant Operating Manual	One volume for Each Unit
White	5-Close out Report	B1-Project Overview	
		B2-Planning Documents	
		B3-Project Correspondences	

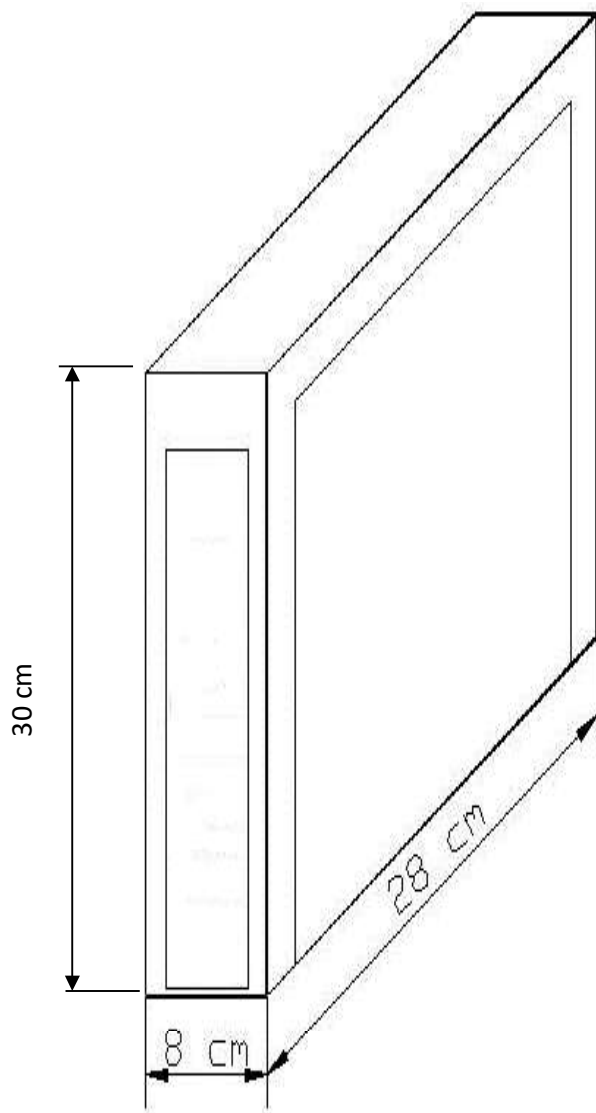
4.2 Binder Cover sheet

For cover sheets of each Dossier, refer to attachment 1.

These cover sheets must be printed on color sheets and on color related to each dossier. (E.g. cover sheets of Engineering Dossier must be printed on Red color sheets)

4.3 Binders Specification

White color best quality (waterproof) **plastic binders with 4 holes** to be used for submission of Final Dossier. See the below picture for dimension of binders.



- More than 80% of capacity of binders must not be filled.

Final Dossier must be dispatched to Client /Client Representative as follows:

- Two (2) Full hard copies (Paper version-reproducible copies)
- Two (2) sets of DVD containing all documents/drawings in Acrobat “PDF” and native formats (Auto CAD, office, etc.)
- Two (2) 1TB external hard drives and Two (2) tablets to the employer's choice that contain all the documents, exactly the same as the paper version and the information inside the DVDs

4.4 E-Files:

Basically, all e-files must be submitted to Client in native and PDF format

4.5 Electronic “Content list”

The content of each binder must be recorded in an Excel file containing useful information about that content (must be agreed with client before submission) and placed in the appropriate folder.

4.6 Stamping

The consultant must approve all documents, drawings, forms, reports, etc. and the seal of approval of the consultant on them (both paper and electronic copies) must be registered.

4.7 Approval Cycle

4.7.1 Engineering Dossier Approval Cycle

It will be completed later.

4.7.2 Vendor Data Book Approval Cycle

- Vendor should prepare one set of VDB in HARD COPY and SOFT COPY according to method illustrated above and submit to Contractor for review and approval by official transmittal.
- Consultant must check and control the DVB attentively, according to the “VDB check list” (attach No. 4) and returns the result to the contractor via Comment Sheet that includes completed check list.
- The punch items must be eliminated by contractor and then new revision of VDB must be sent to the consultant via Transmittal that included the same edited check list.
- This cycle continues until getting approval on sample set. Then the other required copies of VDB is generated and submitted to the consultant through the official letter, at the proper time.
 - Sending another approved version of VDBs, all at once, is permitted.
- The Transmittal form for sending VDB has been shown in attachment no. 3

4.7.3 Construction Dossier Approval Cycle

It will be completed later.

4.7.4 Dossier No 4 and 5 Approval Cycle

It will be completed later.

4.8 Numbering Structure

The numbering method for All 5 dossiers is described below:

NNNN	LLNL	LL	XNN
Project Code	Dossier Code	Initiator code	Conditional: As described below

Dossier number will be written as:

NNNN- LLNL-LL-XNN

4.8.1 Project code:

NNNN-LLNL- LL-XNN

4.8.2 Dossier code:

NNNN-LLNL- LL-XNN

This code consists of two parts, the first two letters indicate the type of document, which here is the final dossier, and is indicated by the code "FB". So "LL" = "FB"

In the second part, the number and acronym of each dossier is shown according to below table:

Dossier Title	Code
Dossier 1: Engineering	1E
Dossier 2: Vendor Data Book	2V
Dossier 3: Construction Book	3C
Dossier 4: Plant Operating Manual	4M
Dossier 5: Close out	5R

4.8.3 Initiator:

NNNN- LLNL-LL-XNN

For dossier no. one, three, four and five, the initiator is EPC contractor

For dossier no. two, these two letters must be filled by abbreviation code of related Vendor/Supplier who has supplied the equipment or goods.

4.8.4 Final part:

NNNN- LLNL-LL-XNN

This part is conditional related to the dossiers' content.

For dossier no. 2:

- X: "L" for local equipment and "F" for foreign equipment
- NN: sequence number for each vendor from "01" up to "99"

For the others:

- X: fix number: "0"
- NN: Area code according to NUMBERING PROCEDURE

Example 1: 22C2-FB4M-YY-000 means Final Dossier No. 4-Plant Operation Manual by "YY" EPC Contractor of Miduk Concentrate Plant phase II

Example 2: 23K1-FB2V-XX-F01 means Final Data book of "XX" company for foreign supply in Khatoon Abad Lime Plant

4.9 Index

Three lists should be prepared as described below and placed at the beginning of each volume (all 3 indexes):

- Index No. 1: The General Structure of dossiers (table number 1)
 - Table number one should be prepared without color and only the row corresponding to each dossier should be highlighted in that dossier.
- Index No. 2: A complete list of the dossiers content (template is attached)
- Index No. 3: Table of contents of each volume (template is attached)

5 ENGINEERING DOSSIER (Dossier 1)

The first Dossier of Final documentation is Engineering Dossier with three engineering books as described below:

1. Final Feasibility Study and Conceptual Design Package (B0)
 2. Basic Design Book (B1)
 3. Detail Design Book (B2)
-
1. All Basic and Detail documents listed in last official Project Document Register must be placed in Basic and Detail Design Books. These documents must be available in their final status and revision.
 2. All documents and drawings must have their original size. When they are A3 size, they must be folded. When they are A2 size and larger, they must be Folded and inserted in plastic covers.
 3. Documents and drawings must be categorized by Engineering Discipline codes
 4. Final Electronic Records in Native and PDF format must be delivered on DVD/Hard Disk. These files must be categorized in folders by Discipline codes. An index list in excel format must be supported these files for searching and hyperlink.

6 Vendors Data books (Dossier 2)

Dossier no. 2 of Final Dossier Package is dedicated to “Vendor Data Books”. Detail of covers must be printed on **Yellow** color sheets.

6.1 General

1. A Vendor Dossier (VDB) must be prepared by the Vendor during the course of the Manufacturing program. These documents must represent the product in the as-built condition and must be submitted to the Contractor for review and approval upon completion of all manufacturing and test activities.
2. All changes in equipment happened during commissioning cycle must be applied in AFC documents and replaced with previous revision by EPC contractor (after consultant approval).
3. Obviously, all the documents mentioned in Sections 1~3 are not available for all equipment. The necessity of submitting or not submitting these documents is determined by the contractor's proposal and the approval of the consultant (or MC by case).

6.2 Vendor Data Book Structure:

Vendor Dossier must be structured in three parts as follows:

6.2.1 Vendor Data Book 1 (B1) - MR & Purchase Order Data

This book must include but not be limited to the following:

6.2.1.1 C1-Contract:

1. Unpriced copies of Vendor's Contract and all approved change orders
2. All minutes, agreements, correspondence and emails related to equipment manufacturing
3. Permits
4. Approved Work orders
5. TBE (Technical Bid Evaluation)

6.2.1.2 C2-MR

- a) The Final Engineering Requisition (MR) including all attachments
- b) Engineering queries and clarifications before PO placement

6.2.2 Vendor Data Book 2 (B2) - Vendor Design Book

This book must include Engineering, Fabrication, Operating and Maintenance Data but not be limited to the following:

6.2.2.1 C1-Vendor Documents

- a) Final MDR and All Finalized Documents according to the MDR

6.2.2.2 C2-TQ's & NCR's

- a) All TQ's and NCR's

6.2.2.3 C3-Manuals

- a) Installation/Erection instructions

- b) Pre-commissioning, Operation and Maintenance Manuals
 - c) Spare parts data including the exploded views and spare parts numbers
 - d) All security access codes, user name and passwords and dongles for users and administrators usually applicable for control systems, telecom and ...
 - e) Catalogues and something like this
- It is necessary for these Manuals to be placed here (C3) even submitted in C1.

6.2.3 Vendor Data Book 3 (B3) – Manufacturing Data Report

“Records, Reports & Certificates” of Vendor must include but not limited to below documents:

- Below documents must be submitted in the mentioned sequence.

6.2.3.1 C1-Material Certificates

Equipment related certificate and document considering bellow item but not limited to them must be issued.

1. Manufacturer's Certificate of Compliance
2. CONTRACTOR's Inspection Release Note (Certificate)
3. Material list/Packing list
4. Pre-shipment Inspection Certificate (Shipping Release Note)
5. Technical certificate of compliance
6. Fully traceable mill certificate according to EN 10204
7. NACE certificate
8. Qualification certificates
9. Calibration Certificates
10. Explosion Proof certificates
11. Type Test Certificate

6.2.3.2 C2-Reports & Records

Equipment related Reports & Records considering bellow item but not limited to them must be issued.

1. Welding inspection records
2. Welder & Operators Qualification Records
3. Dimensional and weight control report
4. NDE reports and other specified Test records
5. NDE Operators Qualification Certificates
6. Heat treatment chart
7. Pressure test records (including Hydro test, pneumatic test, leakage Test)
8. Mechanical running test, functional test, performance test record, etc. as per approved ITP.
9. Performance, NPSH reports, String Test Reports, Etc.
10. Surface finish/painting inspection report
11. All test and inspection reports based on ITP
12. Other inspection and test records as specified
13. Type test report
14. Preservation reports
15. Manufacturer's Data Report
16. Vibration reports
17. Alignment reports
18. over speed test reports

19. String test report
20. Functional test report either mechanical or electrical
21. Balancing test reports
22. Dismantling reports
23. IP test and reports
24. Final inspection reports
25. Assembly inspection reports
26. Factory Acceptance Test (FAT)

6.2.3.3 C3-Procedures

Equipment related Procedures considering bellow item but not limited to them must be issued.

1. Inspection and Test Procedure (ITP)
2. Approved quality plan
3. Welding procedure specification (WPS) and PQR
4. Visual and NDE procedure
5. Heat treatment procedure
6. Surface preparation and painting procedure
7. Factory acceptance procedure
8. Packing procedure
9. Weld repair procedure
10. Audit procedure and program
11. Vendor QC organization chart
12. Hardness test procedure
13. Material traceability & Identification procedure
14. Impact test procedure (production test weld)
15. Rust prevention procedure
16. Mechanical running test procedure
17. Performance test procedure
18. Balancing procedure
19. NAME PLATE RUBBING SHEET

* All the mentioned certificates, reports, procedure must be scanned to PDF format.

* Index of above documents must be prepared in Excel format with hyperlink to the related documents (PDF) as well as web-based hyperlink.

7 Construction DOSSIER (Dossier 3)

The fourth Dossier of Final documentation is Construction records and Quality Assurance Dossier consist of four Books as described below.

*** Grouping and sorting of mentioned items in each book should be defined in a coordination meeting between related persons of all parties before submission.**

7.1 Definition of Books:

Book 1- Construction Records

Book 2- Quality Control

Book 3- Erection Completion Certificates

Book 4- Commissioning Documents

7.2 Content of books:

7.2.1 Book 1- Construction Records (B1)

Each book should be supported by an excel file for indexes

7.2.1.1 C1-Construction Procedures/Specifications:

Execution plans, lifting plans, piping erection plan, NDT Procedure, WPS, PQR etc.

7.2.1.2 C2-ITP & QCP

7.2.1.3 C3-Welding Documents:

Welder and Welding Operator List & Welder Qualification Test Record

7.2.1.4 C4- Construction Material Documents (round bar, rebar, cement ...):

Material Receiving Inspection Report/Packing Lists/Final Material Data base

7.2.1.5 C5- TQ/SQ/NCR and summary report of last status

7.2.1.6 C6- Permits and Work Delivery Check Lists

7.2.1.7 C7- As built Documents:

Categorized by area and discipline

7.2.2 Book 2- Quality Control (B2)

7.2.2.1 C1- Civil Data

1. Excavation records
2. Framework records
3. Reinforcement records
4. Concrete lab records
5. Concrete work records
6. Cement and aggregates material certificates
7. Backfill inspection records
8. Soil compaction records
9. Architectural inspection records for Building doors and windows, paving, road, trench, ...

7.2.2.2 C2- Steel Structure Data

1. Welding records (if any)
2. Painting and touch-up records
3. Embedded part inspection
4. Alignment And Plumpness of Column & Beam
5. Full Bolting Report

6. Grouting/Meshing/fire protection Inspection Reports
7. Installation records

7.2.2.3 C3- Piping test package Data

1. Material certificates and lists
2. Painting, coating and insulation inspection records
3. Welding records
4. WPS/PQR records
5. Joint history card (grouped by line lists)
6. Pressure test records
7. Flushing and Cleaning Inspection Report
8. Drying Inspection Report
9. Supporting records (fabrication and installation)
10. Reinstatement Check List
11. Erection/installation records
12. Warehousing records, OPI report and Material Balance records

7.2.2.4 C4- Mechanical Data-Fixed equipment

1. Installation /erection records
2. Grouting Report
3. Welding/NDT/PWHT records
4. Alignment/plumbness records
5. Bolting/anchoring reports
6. Torque reports
7. Hydro test and cleaning records (if any at site)
8. Leak test (if any at site)
9. Lining reports
10. Manhole blinding/ nozzle blinding/full bolting records (if any)
11. Painting and insulation records
12. Name plate data and attaching control records
13. Gas blanketing/purging records (if any)
14. Instrument/Nozzle installing records
15. Stair/walkway/platform alignment records
16. Warehousing records, OPI report and Material Balance records

7.2.2.5 C5- Mechanical Data-Rotary Equipment

1. Pad Check
2. Grouting Report
3. Torque Control
4. Installation records
5. Shaft and Coupling Alignment
6. Warehousing records, OPI report and Material Balance records

7.2.2.6 C6- Electrical Data

1. Field QC form for Local control station
2. Inspection of LV Power cable
3. Field QC form for Conduit & Tray Installation
4. Inspection of Low Voltage Electrical motor
5. Field QC form for Cabling
6. Field QC form for Electrical motor
7. Field QC form for LV switchgear & MCC
8. Field QC form for Fire alarm and firefighting System
9. Field QC form for BUS DUCT INSTALLATION
10. Field QC form for Lighting & Power socket system
11. Field QC form for Earthing & Lightning Work
12. Field QC form for Transformers
13. Field QC form for batteries
14. Field QC forms for UPS and Battery chargers
15. Field QC forms for Electrical Heat traces
16. Field QC forms for Cathodic protection system
17. Field QC form for HVAC
18. Warehousing records, OPI report and Material Balance records

7.2.2.7 C7- Instrument Data

1. Field QC form for Local control panel and stations
2. Field QC form for Conduit & Tray Installation
3. Field QC form for Cabling
4. Field QC form for Earthing & Lightning Work
5. Field QC form for Earthing & Lightning Work
6. Field QC form for hookup installation
7. Field QC form for control panels (DCS) installation
8. Field QC form for wiring
9. Field QC forms for Control desks and monitoring Systems
10. QC forms for instrument Calibration
11. Warehousing records, OPI report and Material Balance records

7.2.2.8 C8- Telecommunication Data

1. Field QC form for CCTV
2. Field QC form for telephone & paging systems

7.2.2.9 C9-Safety

1. Safety Procedures and specifications included HAZOP
2. Safety reports and records

7.2.3 Book 3- Erection Completion Certificates (EC) (B3)

All EC's of each unit must be placed in one Volume

7.2.4 Book 4- Commissioning Documents (B4)

7.2.4.1 C1-Precommissioning Completion Certificates

7.2.4.2 C2-Commissioning Completion Certificates

7.2.4.3 C3-Training package

Contractor should prepare the package for each training course including training schedule, syllables, trainees name and information, results, certificates, related letters and correspondences and Certificate of Sufficiency of training.

7.2.4.4 C4- All Supervisory reports

8 PLANT OPERATING MANUAL DOSSIER (Dossier 4)

Plant Operating Manual must be submitted to Client in separate binder per unit. This book should be included but not limited to the following:

1. Plant commissioning manual
2. Plant operating manual
3. Plant maintenance manual and PM & CL Forms
4. Plant shut down and restarting manual
5. Safety conditions during operation, maintenance etc.
6. Special tools list
7. Other related procedures

9 CLOSE OUT REPORT (Dossier 5)

Contractor must issue the "close out report" two months after the last provisional acceptance certificate. As a minimum requirement, the contractor's close out report must cover the subjects listed hereinafter.

9.1 B1. Project Overview

1. Project description
2. Contract scope of work
3. Contract key dates (Plan vs Actual Dates)
4. Main contract between EPC contractor and Client with all amendments
5. All Approved change orders/extra works packages (CA/CR-CP with supporting documents) with a summary sheet of all CA/CR
6. Project financial summary report (Initial contract value, approved change value, adjustment value, etc.)
7. Invoices:
 - part1: Final project invoice with details
 - Part2: Approved cover sheet of all provisional invoices, change invoices and escalation invoices
8. Payments: summary report of all payments
9. Claims: all approved claim packages (with supporting documents)
10. Delay Analysis Bill report
11. Final Equipment list included local and foreign equipment
12. Final Erection Completion Certificate List
13. Trial Run Reports and Logs

14. Performance Guaranty Test
15. Provisional Acceptance Test Certificate
16. Final Acceptance Test Certificate
17. Recoupment account for Contract
18. Delivery Certificates such as: Mechanical Completion, ECC, PAC, FAC

9.2 B2. Planning Documents

1. All revisions of certified Project Master Time Schedule
2. All revisions of certified CBS and WBS
3. All Management procedures in the final status
4. All Monthly Progress Reports (Engineering, procurement, construction, installation & commissioning report)
5. Lesson learned package
 - This question should be answered as a minimum request: what could be done to improve the project execution process?
6. Illustrated Report
 - This report should be done according to the "reporting procedure" instruction and details

9.3 B3. Project Correspondences

1. All Project Meeting Minutes. It must be divided to "Foreign" and "Local" section. These sections must be supported by an excel file including details data according to the agreed format.
2. All Letters between contractor and other parties. It must be divided to "Received Letters" and "Sent Letters". This section must be supported by an excel file including letters data according to the agreed format.
3. All E-mails between contractor and foreign party/licensor.

10 Attachments

10.1 ATTACHMENT-1-A Vendor Dossier Cover Sheets Sample

Sample of cover sheets for vendor's binders to be used for dossier number 2

10.2 ATTACHMENT-1-B General Dossier Cover Sheets Sample

Sample of cover sheets for binders to be used for other dossiers

10.3 ATTACHMENT-3 VDB Transmittal

10.4 ATTACHMENT-4 VDB check list