DOCUMENT NUMBERING STANDARD

APPROVALS

Name	Title	Signature	Approval Date
Michael Liao	Senior Manager, Technical and Project Services		APR 26,2019
Ian Rowe	Manager, Drafting and Document Control		APRIL 26/19

PURPOSE

The purpose of this document is to provide a standardized nomenclature to identify deliverables using unique and traceable filenames and numbers.

INTENDED AUDIENCE

This document is a standard for *all stakeholders* engaged on projects at Pembina.

It is a key reference standard for project managers, project team participants, document controllers and Contractors to understand the document control expectations at Pembina.

DOCUMENT INFORMATION

DOCUMENT OWNER

This document is owned by the Technical & Project Services department.

REVISIONS

Revision #	Revision Date	Revision Notes	Revised By
0	2018.06.29	Issued for Use	Tracey Spence
1	2019.04.26	Issued for Use	Tracey Spence

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1.0 PURPOSE

The purpose of this document is to standardize the identification of deliverables by using unique and traceable numbers and filenames. Pembina Document Control manages two types of deliverables; Controlled Engineering Records (CER) and Project Records (PR). Each deliverable type has its own respective nomenclature, assigned and controlled by Pembina Document Control. All deliverables shall be assigned a document number on creation.

CERs are deliverables that support the effective operation and maintenance of a facility or pipeline and must be kept up to date for the life of an asset.

PRs provide evidence of results achieved or activity performed. PRs are not modified after project completion and may be of historical value. They may need to be referenced as evidence of a decision or completion of an activity on the project.

2.0 SCOPE

This Standard applies to all deliverables generated or modified for a Pembina project or asset.

2.1 Exclusions

- Working copies of non-issued/in-progress native documents
- Emails
- “bootleg” pdf deliverables
- Vendor Deliverables

2.2 Deviations or Variance

Requests for exceptions and deviations (with comments and justifications) shall be submitted at the time of quotation and shall be resolved prior to proceeding with further consideration of the proposal or award of order.

3.0 KEY TERMS, ACRONYMS AND ABBREVIATIONS

Must is a mandatory requirement, which is required to meet legislation requirements.

Shall is an absolute requirement, which is to be followed strictly in order to conform to the standard.

Should is a recommendation. Alternative solutions having the same functionality and quality are acceptable.

May indicates a course of action that is permissible within the limits of the standard permission.

Can is conditional and indicates a possibility open to the user of the standard.

Table 1. Definitions

Term/Acronym/Abbreviation	Definition
Asset	Pembina owned and/or operated facilities, pipelines and terminals
BU	Business Unit
Contractor	Any person or firm contracted by Pembina to provide services
CER	Controlled Engineering Record
DC	Document control
Deliverable	Project drawings and documents
EDMS	Electronic document management system
Originator	Person or Contractor responsible for the creation or submittal of a deliverable
PR	Project Record
TDP	Technical Documents and Projects. A department within drafting and document control
Vendor	Any person or firm contracted by Pembina to provide equipment and/or material

4.0 REFERENCE DOCUMENTS

Table 2. Reference Documents

Document Number	Document Name
TSU-TPS-DC-PRO-STD-001	Document Control Process Standard
TSU-TPS-DC-STND-STD-003	Deliverable Exchange Standard
TSU-TPS-DC-STND-STD-004	Deliverable Quality Standard
TSU-TPS-DC-STND-STD-005	Vendor Deliverable Standard
TSU-TPS-DF-PRO-STD-001	Pembina Drafting Standard
TSU-TPS-DDC-REF-FRM-001	Drafting and Document Control Support Request Form
TSU-TPS-DC-REF-FRM-002	Deliverable Number Request Form
TSU-TPS-DC-REF-IST-001	Document Control Process Instruction Manual
TSU-TPS-DC-TEMP-FRM-001	Document Deliverable Requirements Template
TSU-TPS-DC-REF-IST-006	Document Control Service Level Agreement

5.0 RESPONSIBILITIES

Key roles and responsibilities include:

- Process Owner: Drafting and Document Control
- Primary end-users (deliverable originators):
  Project managers
  Project team
  Document control
  Contractors

6.0 DOCUMENT CONTROL PROCESS OVERVIEW

- Deliverables are defined in accordance with Pembina's standards;
- Document Control issues unique numbers for each deliverable;
- All deliverables are controlled and monitored during their lifecycle of submittal, distribution, review and acceptance for the multiple versions of issuance;
- Upon completion of the project, deliverables are turned over for operational use, transferred to FileNet, and/or are archived for historical reference;
- The expectations for Contractors are included in the engagement contracts and/or purchase orders;
- Deliverables are managed in an electronic document management system (EDMS).

7.0 PROJECT RECORDS (PR)

7.1 Number Format

Table 3. Project Record Number Structure

AAAAAA	-	BB	-	CCC	-	DDDDD
Project Code	-	Discipline Code	-	PR Type Code	-	Assigned Number

Example: C17223-PM–RPT-00004

7.2 Number Component Definitions

7.2.1 Project Code

The project code identifies the project and is the AFE number. If a document is shared amongst multiple AFEs, the predominant AFE shall be used. The project manager provides the number to document control. This shall be done at the earliest phase of the project and will be used throughout the lifecycle of the project.

7.2.2 Discipline Codes

All deliverables belong to one of the listed disciplines.

Table 4. Discipline Codes

Code	Description
AB	Aboriginal
CM	Communication (Telecom)
CS	Construction
CX	Commissioning
CV	Civil
DC	Document Control
DR	Drafting
EL	Electrical
EG	General Engineering
EV	Environment
GV	Governance (used for PDGL Gate approval deliverables)
GT	Geotechnical
HT	Hydrotechnical
IC	Instrumentation & Controls
LN	Land
ME	Mechanical
OM	Operations & Maintenance
MA	Marine
PC	Project Controls
PL	Pipeline
PM	Project Management
PR	Process
QA	Quality Assurance/Quality Control
RA	Rail
RG	Regulatory
SA	Safety
SC	Supply Chain
ST	Structural
SV	Survey

7.2.3 PR Type Code

The PR Code generally describes the document type and shall be chosen from the list included in Appendix A – List of PR Type Codes.

7.2.4 Assigned Number

Assigned numbers are created by Pembina Document Control through Pembina's EDMS upon request. Assigned numbers create uniqueness and do not represent sequence.

8.0 CONTROLLED ENGINEERING RECORDS (CER)

8.1 Number Format

Table 5. CER Number Structure

AAAAA		BB-BB		CCCCC
Facility ID	.	CER Type Code	-	Assigned Number

Example: A7.01-4A-00003

Table 6. CER Number Structure – Demolition Drawings

AAAAA		BB-BB		CCCCC		
Facility ID	.	CER Type Code	-	Assigned Number	_	DEMO

Example: A7.01-4A-00003_DEMO

8.2 Number Component Definitions

8.2.1 Facility ID

A Facility ID is a unique identifier assigned by Pembina Document Control to all Pembina assets. Facility IDs are requested by Project Managers providing location of an asset to Pembina Document Control. Facility IDs are detailed in the Document Control Process Standard (TSU-TPS-DC-PRO-STD-001).

8.2.2 CER Type Code

The CER Code specifically describes the document type, and shall be chosen from the list included in Appendix B – List of CER Type Codes.

8.2.3 Assigned Number

Assigned numbers are created by Pembina Document Control through Pembina's EDMS upon request. Assigned numbers create uniqueness and do not represent sequence.

9.0 DOCUMENT NUMBER & EXISTING FILE REQUESTS

9.1 New Document Number Requests

All deliverables shall be assigned a document number on creation by Pembina Document Control. Originators initiate the document number request by completing the "New PR Number" or "New CER Number" worksheet on the Document Number Request Form (TSU-TPS-DC-REF-FRM-002) and submitting it to document control by email to the applicable email address in Section 9.3. Requesting Company, Pembina Project Manager and Project AFE are required at the top of the form. Deliverables with required templates should be requested with the number request.

Table 7. New PR Number Request Form Field Descriptions

Column Heading	Description
DISCIPLINE	Select from available drop-down pick list
TYPE CODE	Select from available drop-down pick list
TITLE	Proper Title Description Completed in ALL CAPS Functions as Complete Document Title for PR record types

Table 8. New CER Number Request Form Field Descriptions

Column Heading	Description
FACILITY ID	Email contact from Table 10 below for assistance
LOCATION	Include legal land description of the Facility ID
DISCIPLINE	Select from available drop-down pick list (use specified McLaren Discipline for CER)
TYPE CODE	Select from available drop-down pick list
TITLE	Completed in ALL CAPS Can be left blank Functions as Title Line 3 for CER record types

9.2 Existing Document Requests

CER record type deliverables are available by request for update (edit/modification) or for reference. Deliverables for update are provided in native format. Deliverables for reference are provided in PDF format. Deliverable originators initiate the request by completing the "Existing Document" worksheet on the Document Number Request Form (TSU-TPS-DC-REF-FRM-002) and submitting it to document control by email to the applicable email address in Section 9.3. Requesting Company, Pembina Project Manager and Project AFE are required at the top of the form. Refer to the Deliverable Exchange Standard (TSU-TPS-DC-STND-STD-003) for instructions on receiving information from Pembina.

Table 9. Existing Document Request Form Field Descriptions

Column Heading	Description
DOCUMENT NUMBER	Complete Document Number of the deliverable
TITLE	Title of the Deliverable
REQUEST TYPE	Select from available drop-down pick list: "FOR UPDATE – NATIVE FORMAT" or "FOR REQUEST – PDF FORMAT"

9.3 Document Control Contact

All emails shall include an active Pembina AFE or MOC number in the email subject line and are subject to the Document Control Service Level Agreements (TSU-TPS-DC-REF-IST-006).

Table 10. Document Control Contacts

Executing Project/Asset Owner	Email Contact
CBU	CBU_DC@pembina.com
GBU	GBUdocumentcontrol@pembina.com
Major Projects	MP_DC@pembina.com
NBU	NBU_DC@pembina.com
OBU	OBU_DC@pembina.com
TBU	TBU_DC@pembina.com
Contact a Pembina project manager or documentcontrol@pembina.com to obtain the correct email address if unknown	

10.0 APPENDIXES

Appendix A – PR Type Code List

Type	Description
APP	Application (Typically Regulatory)
BSC	Business Case (GV Only)
CAL	Calculation
CML	Project Change Management Log (GV Only)
CRT	Design Criteria
CWP	Construction Work Package
DBM	Design Basis Memorandum
DCN	Design Change Notice
DDM	Deliverables Distribution Matrix
DDR	Document Deliverable Requirements
DRC	Decision Record
DRP	Daily Report
ERP	Emergency Response Planning (ERP)
EST	Estimate
EWP	Engineering Work Package
FCN	Field Change Notice
FCR	Field Change Request
FRM	Form
GDR	Decision Record (GV Only)
GPT	Project Trend (GV Only)
ICD	ICM Decision Record (GV Only)
IDX	Index (Project Data Indexes only)
ILI	In-Line Inspection
IPT	ICM Presentation (GV Only)
IRP	Incident Report
IRR	Inspection Release Report
IST	Instruction
ITP	Inspection & Test Plan
LLC	Line Locates
LLL	Lessons Learned Log
LST	List
LTR	Letter
MAP	Map
MDR	Master Document Register
MEM	Memo
MOM	Minutes of Meeting

Type	Description
MPT	Management Presentation (GV Only)
MRP	Monthly Report
MRQ	Material Requisition
NCR	Non Conformance Report
PCL	Project Classification (GV Only)
PCN	Project Change Notice
PDR	Piping Design Registration
PHA	Process Hazard Analysis
PIC	Picture/Photo
PLN	Plan
PLX	Pipeline Crossing
PRO	Procedure
PRS	Presentation
RDX	Road Crossing
RFI	Request for Information
ROW	Right-of-Way Map (PLA)
RPT	Report
RWX	Railway Crossing
SCD	Scope Change Document (GV Only)
SCH	Schedule
SCM	Screening Memo (GV Only)
SDR	Spec/Standard Deviation Request
SIM	Simulation
SKT	Sketch
TBE	Technical Bid Evaluation
SOW	Scope of Work
SPC	Specification
STD	Standard
STY	Study
SVY	Survey
TEM	Template
UTX	Utility Crossing
WRP	Weekly Report
WTX	Water Crossing
XRF	X-Ray Film
XRR	X-Ray Report

Appendix B – CER Type Code List

McLaren Discipline	CER Type Description	CER Type Code	Notes
Reference	Piping & Instrumentation	00-1A	Models for Piping and associated Instrumentation, Pipe Shoes, Pipe Clamps, In-Line Piping Equipment
Reference	Electrical	00-1B	Models for Cable Trays, Lighting, Grounding, Cables
Reference	Equipment	00-1C	Models for Transformers, Ratio Towers, Vendor Supplied Model Packages ex. Pump and Pump Skid
Reference	Structural	00-1D	Models for Concrete Barriers, Steel Supports, Piling, Stairs, Platforms, Catwalks, Buildings
Reference	Civil	00-1E	Models for Survey, Grading, Contours
Reference	Instrument and Control Index Master File	00-1F	Excel Master file that contains project data index information. Produces 3 PDF output files: “Control System I/O Index” (02-3S), “Instrument Index” (02-3N) and “Setpoint Index” (02-3R)
Civil or Structural	Grading Plan	01-1C	Fencing and Road Plans/Profiles
Civil or Structural	Pile Location Plan	01-8A	Piling, Pile Schedules
Civil or Structural	Support Detail	01-8B	Steel, Concrete, Structures, Platform
Civil or Structural	Building Layout	01-8C	Sections, Elevations, General Structural, HVAC layout
Civil or Structural	Foundation Detail	01-8D	Foundations, Risers, Skid Pads
Civil or Structural	Grading Detail	01-8E	Grading Cross Sections
Civil or Structural	Road Detail	01-8F	
Electrical	Arc Flash Study Report	02- 8A	
Electrical	Symbol Legend	02-1A	
Electrical	Single Line Diagram	02-1B	
Electrical	Distribution Schematic	02-1C	Power Distribution
Electrical	Equipment Wiring Diagram	02-1D	UPS, Motor Control Circuit, MOV, Switchgear
Electrical	Control System Architectural	02-2A	
Electrical	IO Address Assignment	02-2B	
Electrical	Shutdown Key	02-2C	Control Key, Sequencing Key, Truth Table, Interlock Narrative
Electrical	Control System Wiring	02-2D	PLC I/O Loop Wiring, includes low voltage (120V/24V distribution), Intercom, RTU, OMNI, Pump Control, Yard Lighting, VFD, Panel Termination
Electrical	Instrument Wiring Diagram	02-2E	
Electrical	Panel Layout	02-2F	Fabrication Details, Sections, and Elevations
Electrical	Panel Schedule	02-2G	
Electrical	Junction Box Layout	02-2H	
Electrical	Equipment Installation Detail	02-2J	Standard Details, Actuator Mounting Detail
Electrical	Area Classification	02-3A	
Electrical	Area Classification Guidelines	02-3B	Area Classification Details
Electrical	Grounding System	02-3C	Grounding Plan
Electrical	Cable Routing Plan	02-3D	Any Cable Routing, Cable Tray, U/G Conduits, Conduit Layout, Electrical Plot Plan
Electrical	Equipment Layout	02-3E	Site Layout, Equipment, Buildings, Sections, Electrical Layout

McLaren Discipline	CER Type Description	CER Type Code	Notes
Electrical	Cable Schedule	02-3F	Cable or Conduit
Electrical	Cathodic Protection Plan	02-3G	Facility Cathodic Details
Electrical	Communication	02-3H	Telecom
Electrical	Standard Stub-Up Details	02-3J	
Electrical	Load List	02-3M	
Electrical	Instrument Index	02-3N	PDF output file from 00-1F (effective May 1, 2019 for go-forward)
Electrical	Heat Tracing	02-3P	Isometrics, Panels, Schematics, Wiring, Schedules, Layouts
Electrical	Data Sheet	02-3Q	
Electrical	Setpoint Index	02-3R	PDF output file from 00-1F (effective May 1, 2019 for go-forward)
Electrical	Control System IO Index	02- 3S	PDF output file from 00-1F (effective May 1, 2019 for go-forward)
Electrical	Control Narrative	02-3T	
Electrical	Block Diagrams	02-5A	Level Diagram, Logic Diagram
Electrical	PLC Functional Design Document	02-5B	
Electrical	HMI Functional Design Document	02-5C	
Electrical	Signal Exchange Protocol	02-5E	
Electrical	Bill of Material	02-7A	Name Plate
Electrical	Notes	02-7B	
Electrical	Arc Flash Study Report	02- 8A	
Electrical	ETAP File	02-8B	
Mechanical	Plot Plan	01-1A	Site Plans
Mechanical	Key Plan	01-1B	
Mechanical	Schematic	01-2C	
Mechanical	Location Sign	01-3J	
Mechanical	Data Sheet	01-3Q	
Mechanical	Piping Plan	01-4A	Fire Suppression System, Control Building, Piping Details
Mechanical	Piping Elevation	01-4B	
Mechanical	Piping Section	01-4C	
Mechanical	Equipment Detail	01-6A	Flare Stacks, Vessels, Strainers, Tanks, Meters, Pumps, Drip Trays, BS&W, Barred Tees, etc
Mechanical	Piping Isometric	01-7A	Including Bill of Material
Mechanical	Pipeline Alignment Sheet	01-9A	
Mechanical	Trap Assembly Detail	01-10A	
Mechanical	Valve Assembly Detail	01-10B	
Mechanical	Tie-In Detail	01-10C	
Mechanical	Pipeline Site Specific Drawing	01-10D	Pipeline Digs
Mechanical	Hydrostatic Test Sections	01-12B	
Mechanical	Pipeline Cathodic Protection Detail	01-14A	
Process	Flow Diagram	01-2A	
Process	Piping and Instrumentation Diagram	01-2B	
Process	Heat and Material Balance	01-2D	
Process	Symbol Legend	01-3A	
Process	Line List	01-3B	
Process	Process Description and Operating Guideline	01-5A	Also described as “PDOG”, Process Control Narrative, Process Narrative