## **Engineering Deliverables - Service Levels**



	Basic	Recommended	Custom
General			
Operation & Maintenance Manual	0	0	Х
Recommended Spare Parts List	0	0	Х
Training Manual			Х
Process			
Process Calculations			0
Process Flow Diagram (PFD)		Х	Х
Piping & Instrumentation Diagram (P&ID)	Х	Х	Х
Battery Limit Table	_	0	Х
Utilities Requirements Summary	0	0	Х
Civil/ Structural/ Architectural	v	V	v
Foundation Loading & Anchoring Diagrams  Structural Layouts*	X	Х	Х
Structural Details*	0	Х	Х
Building Drawings *	0	Х	Х
Structural Calculations		Х	Х
Lifting Study*			Х
Mechanical			
Equipment List	0	Х	Х
Equipment Data Sheets		Х	Х
Subvendor Equipment Drawings	0	Х	Х
Lubrication Schedule	0	0	Х
Storage & Preservation Schedule		0	Х
Mechanical Installation Details	0	0	Х
Piping & Layout			
Plot Plan / Elevation (General Arrangement)	Х	Х	Х
Piping General Arrangement*	0	х	Х
Piping Isometrics*		0	Х
Pipe Support Drawings*	0	0	Х
Line Designation Table*		0	Х
Valve List*		0	Х
Special Piping Items List*		0	Х
3D Plant Model			0
Electrical Engineering			
Electrical Load List	0	Х	Х
Electrical Equipment List Electrical Data Sheets	0	Х	Х
	v	0	Х
Single Line Diagram  Electrical Schematics*	X O	Х	Х
Lighting Panel Schedule*	0	Х	Х
Lighting Study*		^	Х
Lighting Layout*		0	Х
Electrical Equipment Layout*		Х	Х
Electrical Installation Details*	0	0	Х
MCC Layout*	0	Х	Х
Grounding Layout*			Х
Cable Tray Layout*		0	Х
Cable Schedule*			Х
EHT Isometric Drawings*			Х
Area Classification Drawing*			Х
Instrumentation & Controls			
Instrument Index	0	х	Х
Instrument Block Diagram	Х	ж	Х
Instrument Data Sheets		Х	Х
Instrument Sizing Calculations*			Х
Control System Architecture Diagram*		0	Х
			Х
Logic Diagrams	•	0	Х
	0		
Alarm & Setpoint List	U	0	Х
Alarm & Setpoint List Instrument Location Drawings	0	0	Х
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details			
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details Instrument Loop Diagrams*			Х
Logic Diagrams  Alarm & Setpoint List  Instrument Location Drawings  Instrument Installation Details  Instrument Loop Diagrams*  Junction Box Layouts*  Wiring Diagrams	0	0	х
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details Instrument Loop Diagrams* Junction Box Layouts*	0	0	X X X
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details Instrument Loop Diagrams* Junction Box Layouts* Wiring Diagrams	0	0 0 0	X X X
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details Instrument Loop Diagrams* Junction Box Layouts* Wiring Diagrams Cause & Effect Diagrams	0 0	0 0 0 0	X X X X
Alarm & Setpoint List Instrument Location Drawings Instrument Installation Details Instrument Loop Diagrams* Junction Box Layouts* Wiring Diagrams Cause & Effect Diagrams Control Narrative	0 0 0	O O O X	X X X X

HMI Screens\*

## Legend

- X Issued for Review
- O Issued for Information
- \* Scope Dependent

## Types of documentation:

**Electrical Equipment Location Instrument Installation Details Electrical Block Diagrams Electrical Equipment List Electrical Panel Layouts Instrument Data Sheets** Installation Operation & Maintenance Manuals **Electrical Schematics** Motor Data Sheets Instrument Index Loop Diagrams Motor List **HMI Program** Cable Schedule Spare Parts List Weld Procedures **Control Narratives** Shut Down Program **PLC Logic Diagrams** Manufacturers Record Book **Instrument Location Drawings** Document Index / Drawing List **Piping Arrangement Drawings Equipment Data Sheets** Structural Calculations **General Arrangements** Inspection Test Plans **Anchor Bolt Layout** Catalog Cut Sheets Foundation Loads Project Schedule Equipment List P&ID's I/O List Valve List Line List Lifting Diagram Quality Data Book Structural Drawings **Assembly Drawings Fabrication Drawings Piping Spool Drawings** Surface Prep & Painting Long Term Storage & Preservation Instructions