

OPERATIONS UNIVERSITY MANUAL

Version 1.2 — RR Plant Front Cover Edition

EFFICIENCY PLANT FRONT FACADE VIEW-1



BOS Factory — Front Plant View (Double R)

OPERATIONS UNIVERSITY MANUAL

Version 1.0 (Full Draft)

Organization: BOS / Factory Operations

Status: Controlled Draft

Effective Date: 2026-03-30

Homebase Policy: Canonical categorized library remains unchanged; additions are separate references.

Document Control

- Document Title: Operations University Manual
- Version: 1.0
- Review Cycle: Quarterly
- Owner: Operations Leadership
- Prepared by: Russ Assistant (Draft)

Revision History

- v0.1: Initial framework and chapter structure
- v0.9: Full draft chapters + platform blueprint
- v1.0: Publication formatting

Chapter 1 — Operating System Overview (Master Loop)

Purpose

Define one common operating language from intake to stabilized operations.

Core Principles

1. Standardize first, customize second.
2. Optimize flow, not silos.
3. Decisions must be evidence-based.
4. Cadence controls outcomes.
5. Every exception is a learning input.

10-Bucket Master Loop

- 1) Strategy, Demand, Intake

- 2) Land, Entitlements, Preconstruction
- 3) Design, Engineering, Product Standardization
- 4) Procurement, Supply Chain
- 5) Factory Operations, Production
- 6) QA/QC, Commissioning
- 7) Logistics, Delivery, Installation
- 8) Leasing, Revenue Ops, Hospitality
- 9) Finance, Controls, Value Creation
- 10) Automation, AI, Command Center

Cadence

- Daily: Standups, KPI checks, exception triage
- Weekly: Cross-bucket review, bottlenecks, risk updates
- Monthly: Financial/strategic reviews and capacity alignment

KPI Tree (Top Level)

Throughput, cycle time, quality pass rate, on-time delivery, occupancy ramp, margin, valuation uplift.

Chapter 2 — Bucket 1: Strategy, Demand, and Intake

Mission

Admit only executable, high-quality opportunities.

Stages

Capture → Qualification → Scoring → Preliminary Feasibility → Intake Committee Decision.

Mandatory Outputs

- Opportunity brief
- Intake scorecard
- Demand forecast
- Risk assumptions
- Bucket 2 handoff package

KPIs

Qualification-to-approval ratio, intake cycle time, downstream rejection due to poor intake, forecast accuracy.

Gate

Approve / Hold / Reject with documented rationale and owner.

Chapter 3 — Bucket 2: Land, Entitlements, and Preconstruction

Mission

Produce site-feasible, entitlement-mapped, preconstruction-ready projects.

Workstreams

- Site validation
- Entitlement pathway
- Utility/infrastructure readiness
- Preconstruction structuring

Mandatory Deliverables

- Site Feasibility Memo
- Entitlement Roadmap
- Utility Readiness Matrix
- Preconstruction Readiness Plan
- Go/Hold/No-Go decision pack

KPIs

Decision cycle time, entitlement variance, utility readiness accuracy, downstream rework from Bucket 2 misses.

Chapter 4 — Bucket 3: Design, Engineering, and Product Standardization

Mission

Translate project intent into buildable, repeatable definitions.

Workstreams

- Design basis
- Engineering coordination
- Product standardization
- Design QA/QC
- ECO change control

Mandatory Deliverables

- Final Design Basis
- Coordinated Engineering Set
- Standardization Matrix
- QA signoff
- ECO baseline log

KPIs

Design cycle time, clash rate, % standard components, post-release engineering changes, downstream design-related rework.

Chapter 5 — Bucket 4: Procurement and Supply Chain

Mission

Secure materials at target cost, quality, and timing.

Core Elements

Category strategy, vendor qualification, sourcing events, PO governance, lead-time risk control, receiving QA.

Outputs

AVL, procurement plan, long-lead tracker, supplier risk heatmap, PO approval matrix.

KPIs

OTIF, lead-time variance, PPV, supplier defect rate, expedite frequency.

Chapter 6 — Bucket 5: Factory Operations and Production

Mission

Deliver predictable throughput with safe, repeatable execution.

Core Elements

Planning/line balancing, workcell standards, shift control, downtime response, EHS.

Outputs

MPS, daily boards, SOPs, downtime logs, shift closure reports.

KPIs

Throughput, utilization, first-pass yield, rework hours, safety incidents.

Chapter 7 — Bucket 6: QA/QC and Commissioning

Mission

Prevent defects from escaping downstream.

Core Elements

In-process QA gates, final QC acceptance, NCR/CAPA workflow, commissioning.

Outputs

Inspection checklists, NCR register, CAPA log, final signoff, commissioning pack.

KPIs

First-pass acceptance, defect escape rate, NCR closure time, repeat defects.

Chapter 8 — Bucket 7: Logistics, Site Delivery, and Installation

Mission

Move and install modules safely and on schedule.

Core Elements

Transport planning, site readiness, lift plans, install sequencing, closeout.

Outputs

Delivery plan, site checklist, lift/safety briefs, install map, closeout report.

KPIs

On-time delivery, install variance, transit damage, punch aging.

Chapter 9 — Bucket 8: Leasing, Revenue Operations, and Hospitality

Mission

Accelerate occupancy and resident quality.

Core Elements

Funnel strategy, CRM workflow, partnerships, resident onboarding, hospitality standards.

Outputs

Leasing dashboard, campaign plan, partnership tracker, resident SOP.

KPIs

Lead-to-tour, tour-to-lease, stabilization velocity, renewal rate, revenue per unit.

Chapter 10 — Bucket 9: Finance, Controls, and Value Creation

Mission

Protect margin and convert execution into valuation gain.

Core Elements

Cost controls, forecasting, cash management, cap-rate analytics, investor reporting.

Outputs

Variance packs, cash dashboard, unit economics model, value uplift report.

KPIs

Gross margin, EBITDA contribution, variance closure time, cost per delivered module.

Chapter 11 — Bucket 10: Automation, AI, and Command Center

Mission

Scale with automation under strong governance.

Core Elements

Automation registry, HITL approvals, exception handling, auditability, SLA tracking.

Outputs

Automation map, approval matrix, exception playbooks, audit policy.

KPIs

Automation coverage, exception rate, MTTR, SLA compliance, manual-touch reduction.

Chapter 12 — Cross-Bucket Management System

Components

- Enterprise RACI
- KPI dictionary
- Meeting operating system
- Escalation ladders
- Internal audit framework

Chapter 13 — Training Delivery and Classroom Model

Design

Lecture + lab + simulation + assessment.

Tracks

Executive, Plant, Field, Leasing, Finance, Automation.

Certification

Foundation, Cross-Bucket Operator, Systems Leader.

Chapter 14 — Templates and Toolkits

- SOP template
- Checklist template
- Incident report
- CAPA form
- Weekly ops review template
- Handoff acceptance form

Chapter 15 — Case Studies and Capstone

Case Packs

- BOS fly-through decomposition
- Intake-to-install timeline

- Quality recovery case
- Lease-up acceleration case

Capstone

Run one project end-to-end through all 10 buckets with KPI defense.

Chapter 16 — Appendices and Reference Index

- Glossary
- Acronyms and data definitions
- Policy index
- Document control index
- Homepage reference index

Chapter 17 — Internet Platform Blueprint (Login-Based Access)

Goal

Provide secure web access to manuals, SOPs, training modules, dashboards, and certifications.

MVP Features

1. Login + RBAC
2. Manual viewer (searchable)
3. Training progress tracking
4. Quiz/certification engine
5. KPI dashboards
6. Incident/escalation forms
7. Versioned document library

Suggested Stack

- Frontend: Next.js
- Backend/Auth/DB: Supabase + Postgres
- Storage: Object storage for PDFs/videos
- Analytics: Dashboard layer (Metabase/custom)
- Notifications: Telegram/Slack/Email hooks

Rollout

Phase 1: Documents + roles

Phase 2: Courses + exams

Phase 3: KPI + escalation integration

Phase 4: AI-assisted SOP retrieval

Homebase Governance Clause

Canonical file remains unchanged:

CATEGORIZED_MASTER_PDF_LIBRARY_FULL_CLEAN_LEFT_ALIGNED_v3.pdf

All updates are delivered as separate add-on references.