BASIS OF SCHEDULE

Schedule Narrative & Assumptions

118,000 SF Tilt-Wall Distribution Warehouse with Office Buildout

Construction Schedule

Project Parameter	Value
Project ID	WDH-001
Schedule Data Date	20 Jul 2026 (baseline)
Calculated Project Start	20 Jul 2026
Calculated Project Finish	03 Jun 2027
Calculated Duration	220 working days (319 calendar days)
Document Prepared	02 Jul 2026
Prepared By	Big State AI (BSA) — automated draft

DRAFT FOR SCHEDULER REVIEW. This Basis of Schedule was generated automatically by Big State AI from the project schedule model. Dates shown are BSA-calculated via a calendar-aware critical path method (CPM) pass and will be recomputed by Primavera P6 on import; they are provided to support review, not as a certified schedule. A qualified scheduler must review, edit, and accept this document before it is issued or relied upon.

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1. Introduction and Purpose

This document establishes the Basis of Schedule (BOS) for the 118,000 SF Tilt-Wall Distribution Warehouse with Office Buildout. It records the methodology, calendars, work breakdown structure, activity durations, logic, milestones, and the assumptions and exclusions on which the project schedule was developed. Its purpose is to make the schedule transparent and defensible — so that any reviewer can understand not just what the schedule says, but why it says it.

The schedule is a construction schedule containing 42 activities (32 tasks, 10 milestones, 0 level-of-effort) and 62 logic relationships, built on a critical path method (CPM) network. It is a planning baseline: all activities are not-started and the network is fully logic-driven.

2. Schedule Methodology

The schedule is a resource-independent Critical Path Method (CPM) network developed for Oracle Primavera P6. Activity dates are derived from durations and logic relationships; no dates are hard-typed except where a contractual constraint is explicitly noted. The following P6 conventions were applied throughout:

- **Activity type:** task-dependent — activity dates are driven by network logic and the activity calendar, not by resource availability.
- **Duration type:** fixed duration and units — the planned duration is the controlling input and is held when the activity is scheduled.
- **Percent-complete type:** physical percent complete — progress is measured against physical work performed, independent of time or cost expended.

- **Milestones:** zero-duration start and finish milestones mark project authorization and phase completions.
- **Level of effort:** level-of-effort (LOE) activities are modeled as hammocks spanning their driving activities and are excluded from critical-path and float analysis so they do not distort network metrics.

Durations in this document are expressed in working days. Internally the model stores durations in hours and converts using each activity's own calendar hours-per-day — the value is never assumed to be eight. The critical path reported here is the longest logic-driven path through the network (total float at or below zero working days).

3. Calendars

Each activity is assigned a calendar that defines its work pattern and non-work days. Calendars separate the work pattern (hours per day and days per week) from the holiday set, which follows the U.S. Office of Personnel Management observed-date convention (a holiday falling on a Saturday is observed the preceding Friday; on a Sunday, the following Monday). The calendars used in this schedule are:

Calendar	Hours/Day	Work Week	Holiday Set	Activities
BSA_5D_8H_HOL_US	8 h/day	Monday–Friday	U.S. Federal (11 holidays)	42

This schedule uses a single calendar (BSA_5D_8H_HOL_US). Where future phases introduce shift work, weekend work, or continuous operations, additional calendars from the BSA standard library should be assigned and durations re-evaluated accordingly.

4. Work Breakdown Structure

The work breakdown structure (WBS) organizes the scope into deliverable-based packages. The WBS is scope-based, not time-based: nodes represent what is being built rather than when, so the structure remains stable as the schedule is updated. The WBS for this project is:

WBS Code	Description	Activities
WDH-001	118,000 SF Tilt-Wall Distribution Warehouse	—
WDH-001.MIL	Milestones	8
WDH-001.PRO	Procurement	9
WDH-001.CON	Construction	—
WDH-001.CON.01	Site & Civil	3
WDH-001.CON.02	Concrete & Tilt-Wall	6
WDH-001.CON.03	Structure & Envelope	3
WDH-001.CON.04	Warehouse Interior	4
WDH-001.CON.05	Office Buildout	4
WDH-001.CON.06	Site Completion	2
WDH-001.COM	Commissioning & Closeout	3

5. Activity Code Structure

Every activity carries three project-scoped activity codes that classify the work independently of the WBS. They are written to Primavera P6 as activity codes and let a reviewer slice, filter, and roll up the schedule by lifecycle phase, technical discipline, and responsible party. The distribution of activities across each code type is summarized below.

5.1 Phase

What lifecycle phase the work belongs to.

Code	Phase	Activities	Share
MLS	Milestone	7	17%
PRO	Procurement	9	21%
CON	Construction	22	52%
COM	Commissioning	1	2%
CLS	Closeout	3	7%

5.2 Discipline

The primary technical discipline performing the work.

Code	Discipline	Activities	Share
PMG	Project Management	11	26%
CIV	Civil	9	21%
STR	Structural	8	19%
ARC	Architectural	3	7%
MEC	Mechanical	5	12%
ELE	Electrical	5	12%
EIN	Electrical/Instrumentation	1	2%

5.3 Responsibility

Who owns delivery of the activity.

Code	Responsible Party	Activities	Share
OWN	Owner/Client	5	12%
EPC	EPC Contractor	1	2%
GC	General Contractor	13	31%
SUB	Subcontractor	17	40%
VND	Vendor/Supplier	6	14%

Shares are the percentage of all activities (including milestones and level-of-effort) carrying each code value.

6. Milestones and Key Dates

The schedule is anchored by the following milestones. Dates are BSA-calculated (CPM) and subject to scheduler verification against contractual requirements.

ID	Milestone	Type	Calculated Date	Constraint
MIL-00010	Notice to Proceed (NTP)	Start	20 Jul 2026	—
MIL-00060	Long-Lead POs Issued	Finish	22 Jul 2026	—
PRO-00060	Dock Equipment On Site	Finish	16 Oct 2026	—
PRO-00030	Structural Steel Joists & Deck On Site	Finish	06 Nov 2026	—
PRO-00090	Main Electrical Switchgear On Site	Finish	15 Dec 2026	—
MIL-00070	All Long-Lead Equipment On Site	Finish	15 Dec 2026	—
MIL-00020	Mechanical Completion	Finish	28 Apr 2027	—
MIL-00030	Substantial Completion	Finish	12 May 2027	—
MIL-00040	Ready for Service	Finish	19 May 2027	—
MIL-00050	Final Completion	Finish	03 Jun 2027	—

7. Critical Path

The critical path comprises 22 activities running from “Notice to Proceed (NTP)” (20 Jul 2026) to “Final Completion” (03 Jun 2027), with zero total float. It drives the project completion date of 03 Jun 2027. Any slip to a critical activity slips the project end day-for-day.

The critical path passes sequentially through the following phases of work: Construction → Commissioning → Closeout.

ID	Activity	Start	Finish	Dur (wd)
MIL-00010	Notice to Proceed (NTP)	20 Jul 2026	20 Jul 2026	0
CON-00010	Perform Mass Grading & Building Pad	20 Jul 2026	21 Aug 2026	25
CON-00040	Excavate & Form Spread Footings	24 Aug 2026	14 Sep 2026	15
CON-00050	Place Concrete Spread Footings	15 Sep 2026	28 Sep 2026	10
CON-00060	Pour Warehouse Floor Slab — Sections 1 & 2 (Casting Bed)	29 Sep 2026	13 Oct 2026	10
CON-00080	Cast Tilt-Wall Panels (64 Panels)	14 Oct 2026	10 Nov 2026	20
CON-00090	Cure Tilt-Wall Panels	12 Nov 2026	25 Nov 2026	10
CON-00100	Erect Tilt-Wall Panels with Mobile Crane	27 Nov 2026	17 Dec 2026	15
CON-00110	Erect Structural Steel Joists & Roof Deck	18 Dec 2026	11 Jan 2027	15
CON-00120	Install TPO Roofing & Insulation	12 Jan 2027	09 Feb 2027	20
CON-00170	Frame Metal Stud Walls — Office	10 Feb 2027	24 Feb 2027	10
CON-00180	Rough-In MEP — Office	25 Feb 2027	17 Mar 2027	15
CON-00190	Install Drywall, Ceilings & Insulation — Office	18 Mar 2027	07 Apr 2027	15
CON-00200	Install Finishes & Storefront Glazing — Office	08 Apr 2027	28 Apr 2027	15
MIL-00020	Mechanical Completion	28 Apr 2027	28 Apr 2027	0
COM-00010	Perform Commissioning & Start-Up	29 Apr 2027	12 May 2027	10
COM-00020	Complete Punchlist & Final Inspections	29 Apr 2027	12 May 2027	10
MIL-00030	Substantial Completion	12 May 2027	12 May 2027	0
COM-00030	Execute Project Closeout	13 May 2027	19 May 2027	5
MIL-00040	Ready for Service	19 May 2027	19 May 2027	0
CLS-00010	Project Closeout	20 May 2027	03 Jun 2027	10
MIL-00050	Final Completion	03 Jun 2027	03 Jun 2027	0

8. Activity Basis and Durations

The following tables document every activity by WBS package: its planned duration (working days), calculated start and finish, total float, and the basis for the duration and sequencing. The basis text records the reasoning behind each estimate and any item flagged for scheduler confirmation.

8.1 Milestones (WDH-001.MIL)

ID	Activity	Dur	Start	Finish	TF	Basis / Assumptions
MIL-00010	Notice to Proceed (NTP)	MS	20 Jul 2026	20 Jul 2026	0	—
MIL-00060	Long-Lead POs Issued	MS	22 Jul 2026	22 Jul 2026	27	Inserted by the BSA milestone standard — consolidated long-lead purchase-order release.
MIL-00070	All Long-Lead Equipment On Site	MS	15 Dec 2026	15 Dec 2026	92	Rollup of every long-lead delivery — gates Mechanical Completion (BSA standard milestone set).
MIL-00020	Mechanical Completion	MS	28 Apr 2027	28 Apr 2027	0	—
MIL-00030	Substantial Completion	MS	12 May 2027	12 May 2027	0	Target early April 2027 per owner; confirm exact date with owner and AHJ before schedule baseline.
MIL-00040	Ready for Service	MS	19 May 2027	19 May 2027	0	—
CLS-00010	Project Closeout	10	20 May 2027	03 Jun 2027	0	Project closeout / demobilization — ensures Ready for Service and Final Completion are distinct (BSA standard tail).
MIL-00050	Final Completion	MS	03 Jun 2027	03 Jun 2027	0	—

8.2 Procurement (WDH-001.PRO)

ID	Activity	Dur	Start	Finish	TF	Basis / Assumptions

PRO-00010	Issue PO — Structural Steel Joists & Deck	3	20 Jul 2026	22 Jul 2026	27	15-week lead; PO issued immediately after NTP to protect delivery before panel erection completes.
PRO-00040	Issue PO — Dock Equipment	3	20 Jul 2026	22 Jul 2026	27	12-week lead for dock levelers, dock seals, and overhead sectional doors.
PRO-00070	Issue PO — Main Electrical Switchgear	3	20 Jul 2026	22 Jul 2026	27	20-week lead; switchgear must arrive before interior finishes complete.
PRO-00020	Fabricate & Deliver Structural Steel Joists & Deck	75	23 Jul 2026	06 Nov 2026	27	15-week (75 working-day) fabrication and delivery lead time from PO issuance.
PRO-00050	Fabricate & Deliver Dock Equipment	60	23 Jul 2026	16 Oct 2026	122	12-week (60 working-day) lead time from PO issuance.
PRO-00080	Fabricate & Deliver Main Electrical Switchgear	100	23 Jul 2026	15 Dec 2026	87	20-week (100 working-day) fabrication and delivery lead time from PO issuance.
PRO-00060	Dock Equipment On Site	MS	16 Oct 2026	16 Oct 2026	122	—
PRO-00030	Structural Steel Joists & Deck On Site	MS	06 Nov 2026	06 Nov 2026	27	—
PRO-00090	Main Electrical Switchgear On Site	MS	15 Dec 2026	15 Dec 2026	87	—

8.3 Construction (WDH-001.CON)

ID	Activity	Dur	Start	Finish	TF	Basis / Assumptions
CON-00010	Perform Mass Grading & Building Pad	25	20 Jul 2026	21 Aug 2026	0	Includes rough grading, import/export, subgrade prep, and compaction testing for building pad. Duration assumes 9.2-acre site; confirm soil report.
CON-00020	Install Site Utilities — Storm & Sanitary	20	03 Aug 2026	28 Aug 2026	140	Runs in parallel with spread footings; can begin once grading establishes rough grade in utility corridor.
CON-00030	Install Site Utilities — Water & Fire Loop	15	03 Aug 2026	21 Aug 2026	145	Fire loop requires utility permit and water purveyor approval; confirm lead time with AHJ.
CON-00040	Excavate & Form Spread Footings	15	24 Aug 2026	14 Sep 2026	0	—
CON-00050	Place Concrete Spread Footings	10	15 Sep 2026	28 Sep 2026	0	Includes embedded anchor bolts and ledger seats for tilt panels.
CON-00060	Pour Warehouse Floor Slab — Sections 1 & 2 (Casting Bed)	10	29 Sep 2026	13 Oct 2026	0	First slab sections serve as casting bed for tilt-wall panels. Vapor barrier, under-slab plumbing sleeves, and WWF must be placed first.
CON-00070	Pour Warehouse Floor Slab — Sections 3 & 4	10	14 Oct 2026	27 Oct 2026	70	—
CON-00080	Cast Tilt-Wall Panels (64 Panels)	20	14 Oct 2026	10 Nov 2026	0	Panel casting begins as soon as Sections 1 & 2 slab is ready; roughly 3–4 panels poured per day. Embeds, blockouts, and reveal patterns per engineering drawings.
CON-00090	Cure Tilt-Wall Panels	10	12 Nov 2026	25 Nov 2026	0	10-working-day cure period modeled as explicit activity; no long lags. Bond breaker applied prior to pour.
CON-00100	Erect Tilt-Wall Panels with Mobile Crane	15	27 Nov 2026	17 Dec 2026	0	3-week panel erection; crane access requires clear truck court. Temporary bracing remains until steel joists are set.
CON-00110	Erect Structural Steel Joists & Roof Deck	15	18 Dec 2026	11 Jan 2027	0	Erection begins immediately after panels are up. Steel must be on site (PRO-00030) before erection can start.
CON-00210	Pave Car Court & Truck Court	15	18 Dec 2026	11 Jan 2027	65	After panel erection and crane demobilization; aggregate base and concrete or asphalt paving. Confirm paving section with geotech.
CON-00120	Install TPO Roofing & Insulation	20	12 Jan 2027	09 Feb 2027	0	TPO installation dries in the building, enabling interior work to proceed. Confirm R-value and membrane thickness with architect.
CON-00220	Install Landscaping & Irrigation	10	12 Jan 2027	26 Jan 2027	65	Late-job scope after hardscape is complete. Confirm plant palette and irrigation design with civil/landscape architect.
CON-	Install ESFR Fire Sprinkler	25	10 Feb	17 Mar	30	ESFR system; requires building dry-in and

00130	System		2027	2027		fire loop water service. Coordinate with fire marshal for hydraulic calc approval.
CON-00140	Install Warehouse Electrical & Lighting	25	10 Feb 2027	17 Mar 2027	25	Rough-in and fixture installation; LED high-bay lighting. Runs concurrent with ESFR and dock equipment installation.
CON-00160	Install Dock Equipment & Overhead Doors	10	10 Feb 2027	24 Feb 2027	45	Dock levelers, dock seals, and sectional doors. Equipment must be on site (PRO-00060).
CON-00170	Frame Metal Stud Walls — Office	10	10 Feb 2027	24 Feb 2027	0	—
CON-00180	Rough-In MEP — Office	15	25 Feb 2027	17 Mar 2027	0	Electrical, mechanical, and plumbing rough-ins for 6,500 SF two-story office. Coordinate MEP above ceiling with structural.
CON-00150	Set & Energize Main Electrical Switchgear	5	18 Mar 2027	24 Mar 2027	25	Switchgear must be on site (PRO-00090) and warehouse electrical rough-in substantially complete before setting. Utility company coordination required for energization.
CON-00190	Install Drywall, Ceilings & Insulation — Office	15	18 Mar 2027	07 Apr 2027	0	—
CON-00200	Install Finishes & Storefront Glazing — Office	15	08 Apr 2027	28 Apr 2027	0	Includes paint, flooring, millwork, storefront aluminum and glazing. Storefront glazing vendor lead time should be confirmed.

8.4 Commissioning & Closeout (WDH-001.COM)

ID	Activity	Dur	Start	Finish	TF	Basis / Assumptions
COM-00010	Perform Commissioning & Start-Up	10	29 Apr 2027	12 May 2027	0	Includes pre-commissioning checks, MEP systems start-up, fire sprinkler system acceptance test, and electrical point-to-point verification. Open end — no successor; auto-wired to Substantial Completion — review.
COM-00020	Complete Punchlist & Final Inspections	10	29 Apr 2027	12 May 2027	0	Certificate of occupancy inspection, AHJ final, and owner punchlist completion. Approximately 3 weeks combined with commissioning.
COM-00030	Execute Project Closeout	5	13 May 2027	19 May 2027	0	As-built drawings, O&M manuals, warranty letters, and lien releases.

*Dur = planned duration in working days; MS = zero-duration milestone; * = LOE hammock duration derived from its span. TF = total float (working days).*

9. Schedule Logic and Sequencing

The network contains 62 relationships: 60 Finish-to-Start, 2 Start-to-Start, 0 Finish-to-Finish, and 0 Start-to-Finish. Finish-to-Start links account for 97% of the logic, consistent with best practice for a clear, driving network. Every activity other than the opening and closing milestones carries at least one predecessor and one successor, so the network has no open ends and calculates a continuous critical path.

The milestone sequence, in calculated date order, is: Notice to Proceed (NTP) → Long-Lead POs Issued → Dock Equipment On Site → Structural Steel Joists & Deck On Site → All Long-Lead Equipment On Site → Main Electrical Switchgear On Site → Mechanical Completion → Substantial Completion → Ready for Service → Final Completion.

10. Key Assumptions and Clarifications

The schedule was developed on the assumptions and clarifications below, extracted from the activity basis. Each should be confirmed by the project team; any that does not hold may change durations or logic.

- **[MIL-00030]** Target early April 2027 per owner; confirm exact date with owner and AHJ before schedule baseline.
- **[CON-00010]** Duration assumes 9.2-acre site; confirm soil report.
- **[CON-00030]** Fire loop requires utility permit and water purveyor approval; confirm lead time with AHJ.
- **[CON-00120]** Confirm R-value and membrane thickness with architect.
- **[CON-00130]** Coordinate with fire marshal for hydraulic calc approval.
- **[CON-00150]** Utility company coordination required for energization.
- **[CON-00180]** Coordinate MEP above ceiling with structural.
- **[CON-00200]** Storefront glazing vendor lead time should be confirmed.
- **[CON-00210]** Confirm paving section with geotech.
- **[CON-00220]** Confirm plant palette and irrigation design with civil/landscape architect.
- **[COM-00010]** Includes pre-commissioning checks, MEP systems start-up, fire sprinkler system acceptance test, and electrical point-to-point verification.

General assumptions:

- All durations assume uninterrupted access to the work area and timely owner decisions, permits, and submittals.
- Long-lead and procured items are assumed delivered to support the construction sequence; procurement risk is not separately modeled in this draft.
- Durations reflect normal weather for the project location; no weather contingency days are embedded in individual activities.
- The schedule is not resource-loaded; durations reflect assumed typical crew sizes and productivity rather than a leveled resource plan.

11. Exclusions

The following are explicitly excluded from this schedule:

- Resource and cost loading (man-hours, crews, dollars). This is a logic-and-duration schedule only.
- Weather, escalation, and management-reserve contingency as separate activities or buffers.
- Owner-furnished activities and third-party/utility work not stated in the project scope.
- Warranty-period and post-occupancy activities beyond Final Completion.

12. Schedule Quality Review

The schedule was checked against BSA's encoded scheduling rules, which reflect DCMA 14-point assessment principles (open ends, Start-to-Finish relationships, hard constraints, lags and leads, float, duration, level-of-effort handling, and logic density). The review returned 0 error(s), 7 warning(s), and 2 informational note(s).

Severity	Reference	Finding
Warning	PRO-00020	Duration 75d exceeds DCMA threshold of 44d: 'Fabricate & Deliver Structural Steel Joists & Deck'. Consider breaking into smaller work packages.
Warning	PRO-00050	Duration 60d exceeds DCMA threshold of 44d: 'Fabricate & Deliver Dock Equipment'. Consider breaking into smaller work packages.
Warning	PRO-00080	Duration 100d exceeds DCMA threshold of 44d: 'Fabricate & Deliver Main Electrical Switchgear'. Consider breaking into smaller work packages.
Warning	CON-00040	No duration basis for 'Excavate & Form Spread Footings'. State WHY this duration was chosen (quantity × production rate, similar past work, vendor lead time, etc.) in bsa_comments.
Warning	CON-00070	No duration basis for 'Pour Warehouse Floor Slab — Sections 3 & 4'. State

		WHY this duration was chosen (quantity × production rate, similar past work, vendor lead time, etc.) in bsa_comments.
Warning	CON-00170	No duration basis for 'Frame Metal Stud Walls — Office'. State WHY this duration was chosen (quantity × production rate, similar past work, vendor lead time, etc.) in bsa_comments.
Warning	CON-00190	No duration basis for 'Install Drywall, Ceilings & Insulation — Office'. State WHY this duration was chosen (quantity × production rate, similar past work, vendor lead time, etc.) in bsa_comments.
Info	CON-00020	Low-confidence duration on 'Install Site Utilities — Storm & Sanitary' — stated as an estimate without a quantity or production rate. Confirm before relying on this date.
Info	CON-00140	Low-confidence duration on 'Install Warehouse Electrical & Lighting' — stated as an estimate without a quantity or production rate. Confirm before relying on this date.

No structural errors were found: the network has no open ends and calculates a clean critical path. Warnings and notes are items for scheduler judgment, not defects.

12.2 Durations to Review (Lower Confidence)

The following activity durations carry no stated basis or are flagged low-confidence (a bare estimate, or derived from a drawing/photo). Confirm these against quantities and production rates before relying on the calculated dates.

- **[CON-00020] Install Site Utilities — Storm & Sanitary:** stated as an estimate without a quantity or production rate.
- **[CON-00040] Excavate & Form Spread Footings:** no duration basis stated.
- **[CON-00070] Pour Warehouse Floor Slab — Sections 3 & 4:** no duration basis stated.
- **[CON-00140] Install Warehouse Electrical & Lighting:** stated as an estimate without a quantity or production rate.
- **[CON-00170] Frame Metal Stud Walls — Office:** no duration basis stated.
- **[CON-00190] Install Drywall, Ceilings & Insulation — Office:** no duration basis stated.

13. Limitations and Reviewer Sign-Off

This Basis of Schedule and the underlying schedule were generated automatically by Big State AI and represent an AI First Draft. Calculated dates are produced by BSA's calendar-aware CPM pass for review purposes; Primavera P6 will recompute dates on import and remains the authority on the final calculated schedule. The durations, logic, and assumptions reflect typical industry practice for a project of this type and have not been validated against project-specific contract documents, site conditions, procurement lead times, or resource availability.

A qualified project scheduler must review and, where appropriate, revise this document and the schedule before either is issued, submitted, or relied upon for project control or contractual purposes.

Reviewed and accepted by:

Role	Signature		Date
Scheduler (print / sign)		Date	
Project Manager (print / sign)		Date	