SITEGUARD

Contractor Compliance

Pre-Build Product Plan and Wireframes

Clean stakeholder version

A polished planning packet for explaining SiteGuard before and during prototype testing. It captures the product intent, workflow model, data structure, technical plan, testing approach, and screen wireframes.

Document purpose

Use this as the pre-plan story: what the app was intended to solve, how the workflow was designed, where the prototype should be tested, and what should happen before production use.

Planning packet

Wireframes

Prototype validation

Clickable contents

The structure is paced for a product review: plan first, wireframes second, acceptance criteria last.

PLANNED DESIGN

Product concept in one page

A local compliance workspace for contract and insurance control.

1 Primary job

Track whether contractors have current contracts and current insurance before work or site access is allowed.

2 Operating model

Use a configurable workspace with lifecycle stages, department categories, saved panels, alerts, and records.

3 Prototype status

A working local desktop prototype for tester feedback, then security and larger engineering review.

The planning intent

- Replace a spreadsheet-heavy process with structured local project files.
- Make expiration risk visible through badges, filters, dashboard counts, and reports.
- Let non-developer users change category names and process names from Master Setup.
- Keep Save, Save As, Open, Lock, Export, and workspace layout behavior understandable.
- Create Excel and PDF outputs so management and audit reviews do not depend on opening the app.

PLANNED DESIGN

Design assumptions before the build

The prototype is planned around real operations, not a generic dashboard.

Local-first workspace

The first version should run as a desktop app and store project data in a `.siteguardproj` file. This avoids requiring a cloud service before the workflow is validated.

Spreadsheet replacement

Users should feel they can reshape the workspace. Master Setup, report options, and draggable panels are planned because the source process is flexible like Excel.

Prototype honesty

The program can be functional and useful while still being called a prototype until security review, dependency review, and larger development review are complete.

End-user testing first

The next success measure is not feature count. It is whether non-developer testers can manage a contract record from intake through reporting.

PLANNED DESIGN

Who this is for

Each user group sees the same record through a different operational lens.

City management analyst

Needs status summaries, issue visibility, council or management packet support, and performance notes.

Corp yard operations

Needs site access readiness, arrival windows, work orders, facilities, fleet, maintenance, and safety coordination.

Procurement and contracts

Needs agreement type, contract number, lifecycle stage, renewal queue, and document status.

Risk and insurance

Needs COI limits, expiration dates, missing documents, endorsements, and high-risk vendor visibility.

Finance and records

Needs contract value, final invoices, closeout status, CSV backups, PDF packets, and audit-ready exports.

PLANNED DESIGN

Clear product boundaries

This keeps the prototype focused enough to test.

Goals

- Create and manage contractor records from intake through closeout.
- Track contract expiration, insurance expiration, risk, owner, section, and notes.
- Make expired, missing, expiring soon, and compliant states easy to scan.
- Allow categories, lifecycle names, panel layout, and reports to be customized.
- Export Excel and PDF packages for management, audit, and records use.

Not in this prototype

- No cloud multi-user service in the first version.
- No claim of enterprise security certification before formal review.
- No replacement for official ERP, finance, legal, or document systems.
- No role-based permissions or SSO until production requirements are defined.
- No automatic legal judgment about whether a contractor may work.

PLANNED DESIGN

The workflows the prototype must prove

Use cases are intentionally operational and tester-friendly.

1 New vendor intake

Create record, assign section, enter owner, work order, dates, and initial notes.

2 Insurance review

Update COI information, expiration date, risk level, missing document status, and follow-up notes.

3 Renewal review

Filter records expiring soon, request updates, change lifecycle stage, and export an overdue packet.

4 Corp yard access

Confirm site, arrival window, agreement status, safety requirements, and whether access should be held.

5 Management packet

Export Excel/PDF summaries with full table, charts, overdues, notes, and setup details.

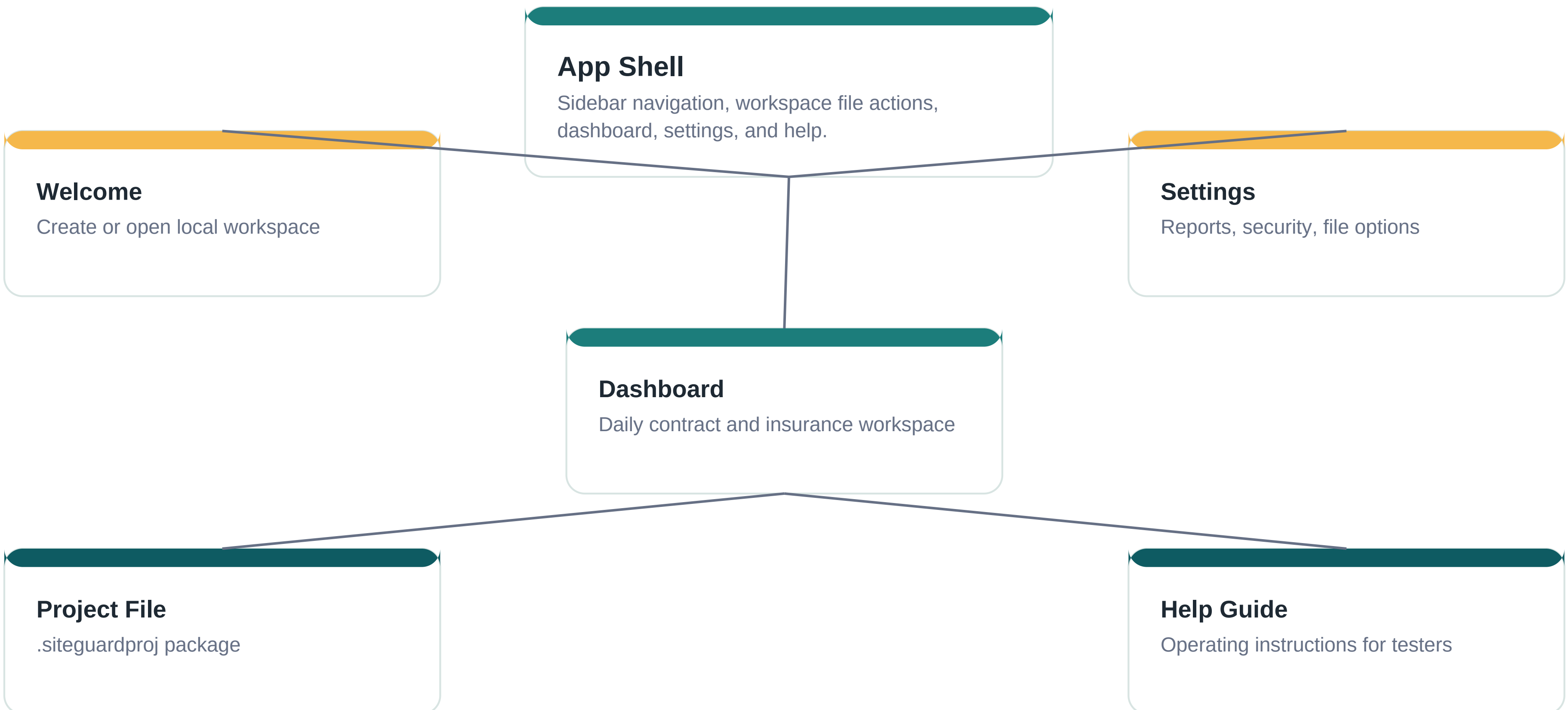
6 New workspace style

Rename categories and process steps so a different department can use the same shell.

PLANNED DESIGN

Planned app structure

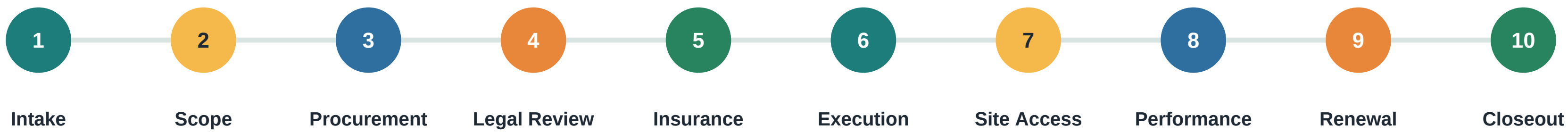
A practical desktop workspace with only the screens needed for testing.



PLANNED DESIGN

Contract lifecycle from start to finish

The workflow is configurable but begins with a city operations default.



Process design note

The lifecycle should be visible as process cards on the dashboard and editable from Master Setup. A workspace can keep this default city workflow or rename the stages for another department, audit, permit, vendor, or compliance process.

PLANNED DESIGN

Simple rules that users can trust

The app should make document risk visible without needing a spreadsheet formula.

Expired

Contract or insurance date has passed.

Missing

Required expiration or certificate data is blank.

Expiring soon

Date falls inside the configured alert window.

Compliant

Contract and insurance are current beyond the alert window.

Alert window

The alert window is user-configurable, planned from 7 to 90 days. Changing it should update dashboard counts, record badges, attention filters, and exported report sections. The default working example is 30 days.

7 days | 30 days | 60 days | 90 days

PLANNED DESIGN

Planned data structure

The model is small enough for a prototype but organized enough for review.

Workspace

- name
- file path
- alert window
- protection state
- layout

Contractor Record

- vendor
- site
- owner
- dates
- risk
- notes

Lifecycle Stage

- value
- label
- description
- order

Category Section

- value
- label
- description
- order

Report Options

- formats
- sections
- filters
- destination

Why this model matters

Configuration, layout, and reports are first-class data because the app is designed to replace a flexible spreadsheet process. The user should be able to reshape a workspace without requiring a code change.

PLANNED DESIGN

Save, open, protect, and transfer

The file model has to feel obvious to users coming from Excel.

New Workspace

Creates a clean `.siteguardproj` package with default categories, stages, layout, and report settings.

Open Workspace

Loads an existing local project. If protected, the user must enter the workspace password.

Save

Writes changes back to the current filename after the project has been created or opened.

Save As

Creates a separate copy with a new filename, useful for templates, backups, and alternate scenarios.

Lock / Close

Closes active data and requires the password to reopen protected workspaces.

Transfer

Allows the project file to be copied, moved, archived, or shared according to local policy.

PLANNED DESIGN

Designed to become more than one workflow

Master Setup is the control panel for adapting the workspace.

Admin-style controls

- Rename category labels and descriptions.
- Rename lifecycle process steps.
- Reorder categories and stages.
- Add or remove sections that do not fit the workflow.
- Save the setup inside the current workspace file.

Use cases unlocked

- Contract and insurance tracking.
- Corp yard job readiness.
- Vendor renewal queue.
- Audit or compliance register.
- Department-specific Excel replacement.

PLANNED DESIGN

Flexible workspace panels

The dashboard should support different review styles without needing separate screens.

Lifecycle
Process cards and stage counts

Categories
Main category queues

Policy
Alert window and status rules

Register
Searchable contractor table

Details
Selected record editor

Master Setup
Workspace structure controls

Planned layout behavior: drag to reorder, resize within constraints, dock, undock, close, reopen, reset layout, and apply quick configurations like Review focus, Data entry, Management view, and Compact audit.

PLANNED DESIGN

Reports must work outside the app

Outputs should support meetings, records, audit, and management review.

Excel workbook
Full tables, summary, overdues, charts, notes, and setup sheets.

PDF packet
Printable management or audit report with status summary and graphics.

CSV backups
Raw tables for spreadsheet import, records retention, or future migration.

README
Explains what files were generated and which report options were selected.

Report presets

Full package | Summary packet | Overdue packet | Custom packet

Users should be able to build the right packet quickly instead of manually rebuilding tables and charts in Excel.

PLANNED DESIGN

Repeatable prototype build process

The source should be GitHub-ready and able to produce Windows installers.

Source
React, TypeScript, Rust, Tauri

Validate
npm test, lint, build, cargo test

Package
Tauri Windows build

Artifacts
NSIS and MSI installers

Review
Tester feedback and hardening

The planned workflow uses GitHub for source control and GitHub Actions for repeatable builds. The pipeline validates the frontend and Rust backend before producing Windows installer artifacts. This helps avoid one-off manual builds on a single laptop.

PLANNED DESIGN

How testers should validate the product

The next step is structured feedback from non-developer end users.

1 Prepare sample workspaces

Use sample or approved test data before live sensitive data.

2 Run real workflows

Ask testers to add records, update dates, change stages, export reports, and save files.

3 Capture friction

Watch where wording, layout, fields, or report options do not match the real process.

4 Revise prototype

Use feedback to update labels, fields, reports, panels, and help material.

5 Wider validation

Share a refined build with a broader user group before final hardening.

PLANNED DESIGN

Known prototype risks

These are not blockers, but they should be openly managed.

- **Security maturity**
  Mitigation: formal security review, dependency review, signed releases, threat model, and stronger audit controls before production.
- **Workflow mismatch**
  Mitigation: test with multiple real user groups and revise labels, fields, report sections, and defaults.
- **Data ownership**
  Mitigation: keep local file behavior clear and document backup, sharing, password, and records guidance.
- **Over-customization**
  Mitigation: Master Setup should allow controlled labels and order, not unrestricted database changes.
- **Report trust**
  Mitigation: include full tables, charts, README, and CSV files so exported packets can be verified.

Wireframe - Workspace Start

Welcome / Workspace Start

SiteGuard
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New Workspace
Create a local project package.

Open Workspace
Browse to an existing project.

Recent Workspaces
List of local project files with protected badges.

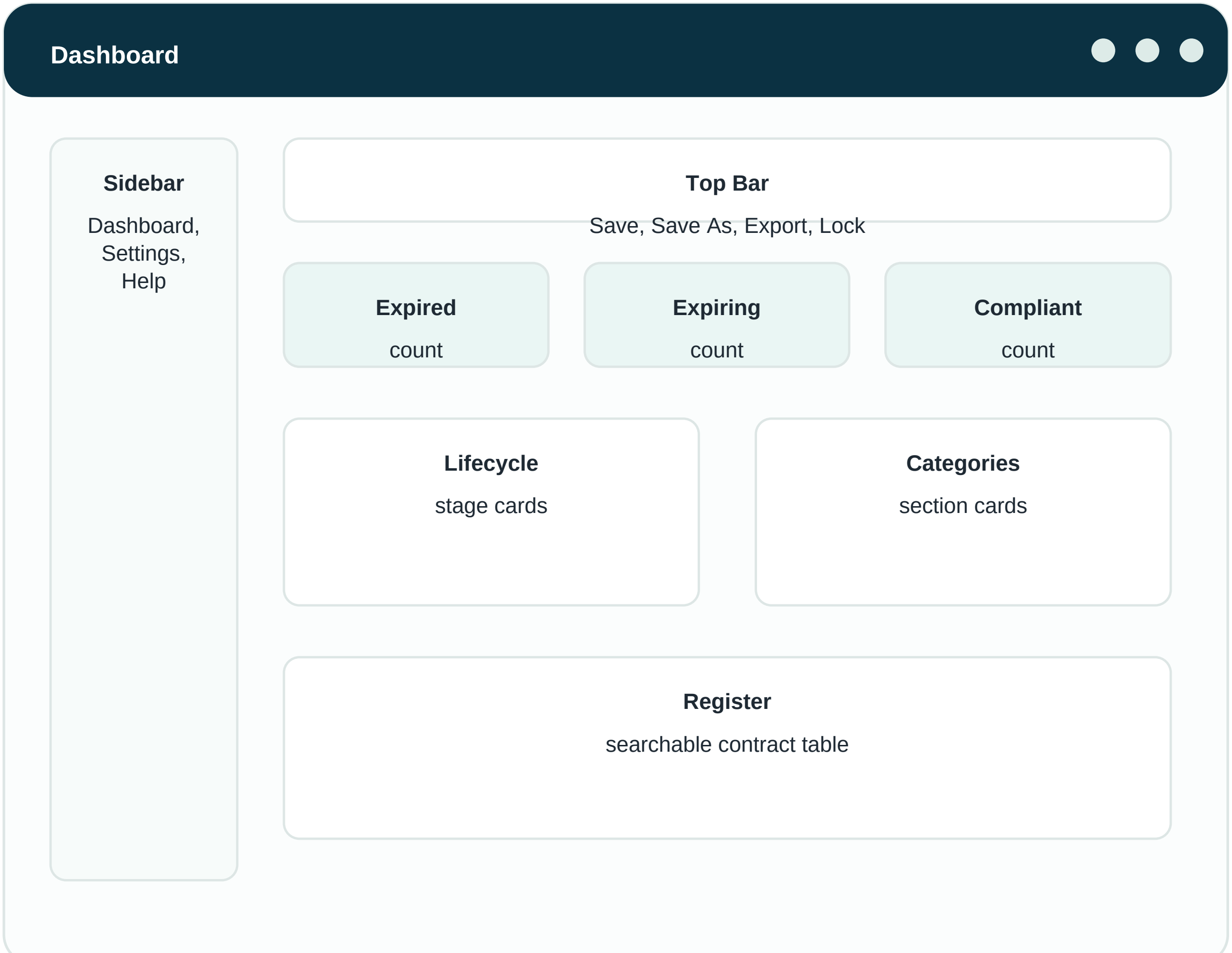
Prototype Notice
Functional prototype pending security review.

1. **File ownership**
   Start by making New and Open obvious to non-technical testers.

2. **Protected badge**
   Recent files should show whether a workspace is password protected.

3. **Prototype note**
   Set expectations before users enter sensitive real data.

Wireframe - Dashboard



1 Answer fast

The page should immediately show what needs attention today.

2 User control

Panels can be moved, resized, docked, undocked, or closed.

3 Daily use

The register and details panel support repeated operational review.

Wireframe - Workspace Windows

Workspace Windows

Quick Layout Menu

Standard, Review, Data Entry, Management, Compact

Lifecycle	Mode	Dock	Undock
Categories	Mode	Dock	Undock
Policy	Mode	Dock	Undock
Register	Mode	Dock	Undock
Details	Mode	Dock	Undock
Master Setup	Mode	Dock	Undock

1 **Drag handle**

Hover state should show a four-arrow cursor and tooltip.

2 **Resize safely**

Width and height changes stay inside window constraints.

3 **Saved per file**

Layout order, mode, and size persist in the workspace.

Wireframe - Register

Register Panel

Search vendor, owner, site

Status filter

Section filter

+

Contractor	Section	Stage	Contract	Insurance	Risk

1 **Scan risk**
Rows prioritize contractor, dates, status, risk, and owner.

2 **Click through**
Selecting a row opens the details editor.

3 **Export source**
This table feeds the full Excel and PDF reports.

Wireframe - Contract Details

Contract Details

Vendor | Contract # | Risk | Save

Vendor, Job, and Site
site, owner, section, arrival window

Contract Record
agreement type, value, start, expiration

Insurance and Risk
COI limit, expiration, missing docs

Performance and Closeout
status, punch list, final records

Analysis Notes
management notes, follow-up, and audit context

1 **One record**
All operational fields for a contractor live in one editor.

2 **Save clearly**
Record edits and workspace save behavior should feel distinct.

3 **Audit context**
Notes explain document requests and status decisions.

Wireframe - Master Setup

Master Setup

Categories	Process Steps	Preview Impact

City Manager / Analysis	Up	Down
Corporation Yard	Up	Down
Public Works	Up	Down
Risk & Insurance	Up	Down
Records / Closeout	Up	Down

Add item **Reset defaults**

1 **Rename fast**
Users can change labels to match their department.

2 **Controlled edits**
Keep configuration flexible without exposing raw database structure.

3 **Reuse value**
The app can be remade for adjacent tracking workflows.

Wireframe - Reports and Security

Settings

Full package | Summary | Overdues | Custom

Report Outputs
Excel, PDF, CSV, README

Report Sections
summary, table, charts, notes, setup

Security
enable password protection

Workspace State
path, save status, protected badge

Export Excel / PDF | Lock Workspace

1. **Report builder**
   Presets make common packets fast; custom mode handles exceptions.

2. **Protection**
   Encrypted workspaces require a password to reopen.

3. **File clarity**
   Users need clear save state and current workspace path.

PLANNED DESIGN

What success looks like

Acceptance criteria for the first complete prototype.

Now

Show prototype to non-developer testers and collect workflow feedback.

Next

Revise labels, fields, reports, help guide, and panel behavior.

Later

Share with broader users, then prepare security and engineering review.

Prototype acceptance checklist

- Create, open, save, save as, close, lock, unlock, and transfer a workspace file.
- Manage a contract from intake through closeout with contract, insurance, site, owner, risk, and notes.
- Show expired, missing, expiring soon, and compliant states in dashboard, register, details, and reports.
- Rename and reorder categories and process steps from Master Setup.
- Move, resize, close, dock, undock, reset, and quick-configure dashboard panels.
- Export Excel and PDF packages with tables, charts, overdues, notes, and setup information.