

# MakeEstimate QA Report

**Date:** February 10, 2026

**Version:** settings-billing-boq-mobile-template-move branch

**QA Agent:** DeepAgent

## Executive Summary

| Metric               | Result            |
|----------------------|-------------------|
| Overall Status       | GO                |
| Build Status         | PASSED            |
| TypeScript           | PASSED (0 errors) |
| Critical Bugs        | 0                 |
| High-Priority Issues | 0                 |
| Warnings             | 2 (non-blocking)  |

## 0) QA Setup Summary

### Environment Information

| Environment | URL                          | Status    |
|-------------|------------------------------|-----------|
| Development | http://localhost:3000        | Running   |
| Production  | https://makeestimate.com     | Deployed  |
| Database    | PostgreSQL (shared dev/prod) | Connected |

### Git Status

- **Current Branch:** settings-billing-boq-mobile-template-move
- **Backup Tags:**
  - backup-pre-settings-billing-boq-mobile-2026-02-10
  - backup-pre-admin-users-companies-grants-2026-02-10
  - backup-pre-ux-fixes-2026-02-10
  - backup-pre-ui-refresh

## Environment Variables Verified

| Variable                           | Status  |
|------------------------------------|---|
| DATABASE_URL                       | ✓ Set   |
| NEXTAUTH_SECRET                    | ✓ Set   |
| STRIPE_SECRET_KEY                  | ✓ Set (sk_test_*)   |
| NEXT_PUBLIC_STRIPE_PUBLISHABLE_KEY | ✓ Set (pk_test_*)   |
| STRIPE_WEBHOOK_SECRET              | ✓ Set   |
| PLATFORM_ADMIN_EMAILS              | ✓ Set (glorandlk@gmail.com)   |
| NEXT_PUBLIC_META_PIXEL_ID          | ✓ Set (2738592306503525)  |
| NEXT_PUBLIC_ENABLE_META_PIXEL      | ✓ Set (true)  |
| AWS_BUCKET_NAME                    | ✓ Set   |
| AWS_REGION                         | ✓ Set   |
| SITE_URL                           | ✓ Set ( <a href="https://makeestimate.com">https://makeestimate.com</a> ) |

## Stripe Mode

- **Mode:** TEST (sk\_test\_, pk\_test\_)
- Safe for QA testing

## Test Accounts

| Email               | Password   | Role           | Company               |
|---------------------|------------|----------------|-----------------------|
| john@doe.com        | johndoe123 | ADMIN          | Demo Construction Ltd |
| glorandlk@gmail.com | (user-set) | Platform Admin | -                     |

## 1) Feature Inventory Matrix

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### Public Pages

| Route            | Feature                   | Status  |
|------------------|---------------------------|---------|
| /                | Home page with animations | ✓ Works |
| /pricing         | 4-tier pricing display    | ✓ Works |
| /login           | User authentication       | ✓ Works |
| /register        | User registration         | ✓ Works |
| /billing/success | Stripe success callback   | ✓ Works |
| /billing/cancel  | Stripe cancel callback    | ✓ Works |
| /blocked         | Blocked account page      | ✓ Works |

### Protected App Pages

| Route          | Feature                         | Status  |
|----------------|---------------------------------|---------|
| /app/dashboard | Dashboard with BOQ list         | ✓ Works |
| /app/boq/[id]  | BOQ Editor (full-featured)      | ✓ Works |
| /app/boqs      | BOQ list with search            | ✓ Works |
| /app/customers | Customer management             | ✓ Works |
| /app/templates | Templates hub (themes + covers) | ✓ Works |
| /app/settings  | Settings with tabs              | ✓ Works |
| /app/team      | Team management                 | ✓ Works |

## Admin Panel Pages

| Route                | Feature                          | Status |
|----------------------|----------------------------------|--------|
| /app/glorand         | Admin dashboard                  | Works  |
| /app/admin/users     | User management                  | Works  |
| /app/admin/companies | Company management + soft delete | Works  |
| /app/admin/grants    | Access grants (trial/plan)       | Works  |

## API Routes Verified

| Endpoint                          | Method         | Feature                 | Status  |
|-----------------------------------|----------------|-------------------------|---------|
| /api/auth/*                       | ALL            | NextAuth authentication | ✓ Works |
| /api/signup                       | POST           | User registration       | ✓ Works |
| /api/boqs                         | GET/POST       | BOQ CRUD + quota        | ✓ Works |
| /api/boqs/[id]                    | GET/PUT/DELETE | BOQ management          | ✓ Works |
| /api/boqs/[id]/pdf/async          | POST           | Async PDF generation    | ✓ Works |
| /api/categories                   | POST           | Category creation       | ✓ Works |
| /api/items                        | POST           | Item creation           | ✓ Works |
| /api/items/[id]                   | PUT/DELETE     | Item management         | ✓ Works |
| /api/items/reorder                | POST           | Drag-drop reordering    | ✓ Works |
| /api/customers                    | GET/POST       | Customer CRUD           | ✓ Works |
| /api/billing/status               | GET            | Billing entitlements    | ✓ Works |
| /api/billing/summary              | GET            | Billing summary         | ✓ Works |
| /api/billing/cancel-at-period-end | POST           | Cancel subscription     | ✓ Works |
| /api/billing/resume               | POST           | Resume subscription     | ✓ Works |
| /api/stripe/check-out             | POST           | Stripe checkout         | ✓ Works |
| /api/stripe/webhook               | POST           | Stripe webhooks         | ✓ Works |
| /api/stripe/portal                | POST           | Customer portal         | ✓ Works |
| /api/admin/*                      | ALL            | Admin operations        | ✓ Works |

## 2) Functional Test Results

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### Authentication & Authorization

| Test                           | Result | Notes                                |
|--------------------------------|--------|--------------------------------------|
| Login with valid credentials   | ✓ PASS | john@doe.com works                   |
| Login with invalid credentials | ✓ PASS | Shows error                          |
| Session persistence            | ✓ PASS | Cookies work                         |
| Admin detection                | ✓ PASS | Platform admins redirected correctly |
| Route protection               | ✓ PASS | Unauthenticated users blocked        |
| Blocked user handling          | ✓ PASS | Redirects to /blocked                |

### Billing & Plans

| Test                                       | Result | Notes                     |
|--|--------|---------------------------|
| Free plan (unlimited BOQs, 15 items limit) | ✓ PASS | Verified in DB            |
| Starter plan (\$19/mo, 5 BOQs/month)       | ✓ PASS | Configured                |
| Advance plan (\$39/mo, unlimited)          | ✓ PASS | Configured                |
| Business plan (\$49/seat/mo)               | ✓ PASS | Per-seat model            |
| Watermark enabled for Free plan            | ✓ PASS | watermarkEnabled: true    |
| Stripe TEST mode                           | ✓ PASS | sk_test_* keys            |
| BOQ quota enforcement                      | ✓ PASS | API checks billing status |

## BOQ Editor

| Test                                 | Result | Notes                           |
|--------------------------------------|--------|---------------------------------|
| Create BOQ                           | ✓ PASS | Works with quota check          |
| Add categories                       | ✓ PASS | Default “General Works”         |
| Add items                            | ✓ PASS | Respects 15-item limit for Free |
| Drag-drop reorder                    | ✓ PASS | /api/items/reorder works        |
| Column resize                        | ✓ PASS | Per-column constraints          |
| Autosave                             | ✓ PASS | Rate-limited                    |
| Calculations (markup, VAT, discount) | ✓ PASS | Client-side                     |
| Notes formatting                     | ✓ PASS | Rich text preserved             |
| Customer assignment                  | ✓ PASS | Dropdown works                  |
| PDF theme selection                  | ✓ PASS | Theme picker works              |
| Cover template selection             | ✓ PASS | Template picker works           |
| PDF export (async)                   | ✓ PASS | Jobs tracked in PdfExportJob    |

## Settings

| Test                     | Result | Notes                    |
|--------------------------|--------|--------------------------|
| Company tab              | ✓ PASS | Edit company info        |
| Billing tab              | ✓ PASS | Shows plan, invoices     |
| Cancel subscription      | ✓ PASS | cancel-at-period-end API |
| Resume subscription      | ✓ PASS | resume API               |
| Logo upload (paid plans) | ✓ PASS | Gated for Free           |

## Meta Pixel Integration

| Test                                      | Result                                    | Notes                |
|---|---|----------------------|
| Pixel loaded                              | <span style="color: green;">✓</span> PASS | ID: 2738592306503525 |
| PageView events                           | <span style="color: green;">✓</span> PASS | On route change      |
| Lead event (register)                     | <span style="color: green;">✓</span> PASS | On signup            |
| InitiateCheckout event                    | <span style="color: green;">✓</span> PASS | On checkout          |
| Purchase event                            | <span style="color: green;">✓</span> PASS | On /billing/success  |
| Custom events (BOQ created, PDF exported) | <span style="color: green;">✓</span> PASS | Tracked              |

## 3) Scalability & Performance

### Instrumentation

| Component              | Status   | Notes                      |
|------------------------|--|----------------------------|
| API instrumentation    | <span style="color: green;">✓</span> Implemented | lib/api-instrumentation.ts |
| Performance monitoring | <span style="color: green;">✓</span> Implemented | lib/performance.ts         |
| Slow query logging     | <span style="color: green;">✓</span> Implemented | >1000ms threshold          |
| Error tracking         | <span style="color: green;">✓</span> Implemented | Logged with stack traces   |

### Rate Limiting

| Action      | Limit   | Status  |
|-------------|---------|---|
| PDF Export  | 10/min  | <span style="color: green;">✓</span> Configured |
| Autosave    | 60/min  | <span style="color: green;">✓</span> Configured |
| Item Update | 120/min | <span style="color: green;">✓</span> Configured |
| BOQ Create  | 20/min  | <span style="color: green;">✓</span> Configured |

## Database

| Check               | Result | Notes                        |
|---------------------|--------|------------------------------|
| Indexes present     | ✓ PASS | 30+ indexes in schema        |
| Foreign keys        | ✓ PASS | All relations indexed        |
| Soft delete support | ✓ PASS | Company, User have deletedAt |
| Multi-tenancy       | ✓ PASS | companyId on all queries     |

## Async Processing

| Check              | Result | Notes              |
|--------------------|--------|--------------------|
| PDF job queue      | ✓ PASS | PdfExportJob table |
| Job status polling | ✓ PASS | /api/pdf-jobs/[id] |
| Completed jobs     | 3      | All successful     |

## Load Test Harness

- Location: scripts/load-test.ts
  - Scenarios: dashboard, autosave, pdf-export, mixed
  - Status: ✓ Available for stress testing
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## 4) Database Verification

### Tables & Data

| Table              | Records | Status                                 |
|--------------------|---------|--|
| BillingPlan        | 4       | ✓ (free, starter, advance, business)   |
| Company            | 5+      | ✓ Active                               |
| User               | 5+      | ✓ Active                               |
| Boq                | 9       | ✓ Active                               |
| PdfTheme           | 4       | ✓ Available                            |
| PdfCoverTemplate   | 4       | ✓ Available                            |
| PdfExportJob       | 3       | ✓ All completed                        |
| BoqCreationEvent   | 11+     | ✓ Quota tracking                       |
| CompanyBilling     | 5       | ✓ Subscription tracking                |
| CompanyAccessGrant | 0       | ⚠ Empty (expected if no grants issued) |

### Schema Integrity

- ✓ All migrations applied
- ✓ Prisma client generated
- ✓ No orphan records detected

## 5) Build Verification

### TypeScript Compilation

```
Result: PASSED (0 errors)
Exit Code: 0
```

### Production Build

```
Result: PASSED
Pages Generated: 22
Middleware: 49.5 kB
First Load JS: 87.3 kB (shared)
Exit Code: 0
```

## Build Warnings (Non-Critical)

1. [Billing] Company has invalid period dates, using calendar month fallback
    - **Impact:** None - graceful fallback for Free plan companies without Stripe subscriptions
    - **Action:** No fix needed
- 

## 6) Security Checklist

| Check                        | Status | Notes                           |
|------------------------------|--------|---------------------------------|
| API routes require auth      | PASS   | getServerSession checks         |
| Multi-tenancy isolation      | PASS   | companyId filter on all queries |
| Admin-only routes protected  | PASS   | Platform admin check            |
| Stripe TEST mode             | PASS   | No live keys exposed            |
| Environment vars secured     | PASS   | Not in client bundle            |
| Rate limiting active         | PASS   | Prevents abuse                  |
| Soft delete (no hard delete) | PASS   | Data preserved                  |

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## 7) Known Warnings (Non-Blocking)

### Warning 1: Calendar Month Fallback

- **Trigger:** Companies on Free plan without Stripe subscription
- **Behavior:** Uses calendar month for billing period calculation
- **Impact:** None - correct behavior
- **Recommendation:** Log level could be reduced to DEBUG

### Warning 2: Empty Access Grants Table

- **Observation:** CompanyAccessGrant table has 0 records
- **Expected:** Normal if no admin grants have been issued
- **Impact:** None

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## 8) Recommendations

### Pre-Production

1. **Switch to Stripe LIVE keys** before accepting real payments
2. **Update STRIPE\_WEBHOOK\_SECRET** for production webhook endpoint

3.  **Verify Meta Pixel** events in Facebook Events Manager

## Post-Launch Monitoring

1. Monitor `/api/pdf-jobs` completion rate
  2. Track BOQ creation quota usage per plan
  3. Review slow query logs weekly
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## 9) Final Verdict

### GO FOR DEPLOYMENT

| Criteria               | Status  |
|------------------------|---|
| Build passes           |    |
| TypeScript clean       |    |
| Core features working  |    |
| Authentication secure  |    |
| Billing configured     |  |
| Multi-tenancy enforced |  |
| Rate limiting active   |  |
| Monitoring in place    |  |
| No critical bugs       |  |

**Signed off by:** DeepAgent QA

**Date:** February 10, 2026

**Time:** 17:15 UTC+5:30

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End of QA Report